

to Top-Gear

MISSION 676



THE TIMELINE



30 welfare and development projects, supervised directly by ministers, plus projects of other departments.

- Planning Commission to come up with projects for the effective implementation of Annual Projects.
- Five-pronged approach under the Chief Secretary for making government services quick and efficient:

1. Right to Services
2. e Governance
3. Disposal of Pending Files
4. Right to Hearing
5. Simplifying of Administrative and Financial Procedures

MISSION 676



Kerala moving forward



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Subscription: 0471-2517036



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Articles/features appearing in this magazine are either commissioned or assigned. Nevertheless, other articles are also welcome. A maximum of 750 wordage is appreciated. Such items should be addressed to

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First Floor
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Thiruvananthapuram
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These may also be e mailed to keralacalling@gmail.com

Unused scripts or photographs will be returned if self addressed envelopes having sufficient postage stamps are also sent with the articles.

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COVERSTORY



The Government of Kerala has gone past the three-year milestone successfully. In its three-year tenure the government tried its best to keep up the word given to the people three years ago. This people-friendly government had implemented many welfare schemes and developmental initiatives for paving the way for a progressive society and growth-oriented economy.

16
Mission 676
Rolled Out

OBSERVANCES

12 **Parenthood**
Guiding the next generation, and forgiving the last
Khyrunnisa A

30 **No Tobacco Day and Kerala**
M L Mahesh



CURRENT



20 Raise your voice,
not the sea level
G S Unnikrishnan Nair



STUDY

38 Aquaculture
Development
Dr. Pradeep Kumar K
Dr. P N Harikumar

In recognition of the notable contribution made by professor Prasanta Chandra Mahalanobis (1893-1972) in the fields of economic planning and statistical development in India, the Government of India has designated 29th June every year, coinciding with his birth anniversary, as the Statistics Day in the category of Special Day to be celebrated at the national level. The objective of the Day is to create public awareness among the people, especially among the younger generation, about the role of statistics in socio-economic planning and policy formulation.

46 Mahalanobis and the
Indian Statistical System
Dr. Kuttappan M

Vagamon - a land of unexplored mountains and valleys with exquisite green meadows, enchanting pine forests, mist clad mountains, sprawling tea estates, amazing waterfalls and everything to enchant a traveller with its breathtaking beauty.

28 Travelogue
Vagamon
Chithra Reshmi S



Dr. Bhaskaran Nair has as many as thirty two titles to his credit which cover a variety of subjects ranging from literary criticism, travelogue, modern science and reflections on men and matters. However, it is as a pioneer in science writing he is acclaimed.

33 Memoir
A Silent Centenary
Sreevarahom Balakrishnan



Education should make students competent enough to consider public issues and form their opinion on them judiciously. Youth is a season of hope and aspiration. It is proper to take advantage of this and develop in our young students the necessary civic competence.

36 Essay
Importance of
Youth Parliament
Dr. K Manoharan Nair, Hari K



Photo Feature 26

NewsScan 8
Horizon 34
Gardening 44
Government
Orders 50

In the mood of a glorious "mission"

The UDF government has completed its three-year milestone successfully. On the eve of the government's third anniversary, Chief Minister Oommen Chandy announced "Mission 676", for the speedy implementation of major infrastructure projects and social welfare schemes for making the state a better place to live in. Mission 676 aims to make the remaining days of the government more effective.

Among the major infrastructure projects that are already on are: the Kochi Metro rail project, in which the first train runs on 31st December, 2015. The Smart City project's first phase opens on 25th March, 2015. The bid on the proposed Vizhinjam Port is opened on 18th June this year, while the first

aircraft touches down at Kannur Airport on 31st December 2015.

The Right to Hearing will be one of the most-keenly watched initiatives to be unfolded by the state government as part of its Mission 676. This would give the public the right to make the ministers and other officials listen to their complaints. Within four months, as many as 130 services would be made available online. By the end of this financial year, the public would be able to avail of 400 services online.

As part of Mission 676, seven projects to be implemented by the team headed by Planning Board Vice-chairman, have been finalised. These include extending the online system for monitoring annual plan



SUBSCRIPTION Payment for subscription can be made by Money Order addressed to the **Director, Information and Public Relations Department, First Floor, Secretariat Annexe, Thiruvananthapuram, PIN- 695 001.**

The subscription amount in cash is received at Information and Public Relations Department, First Floor, Secretariat Annexe, Thiruvananthapuram, PH: 2517036

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FOCUS





implementation to all districts, special system at the Planning Board for monitoring the implementation of Central projects, new initiative to receive proposals online from 2015-16 annual plan onwards, action for approval and implementation of Vision 2030, beginning operations of the consortium formed to tap the expertise of retired professionals, introducing the Kerala Infrastructure Bill and setting up of the Kerala State Infrastructure Development Board and revising agriculture innovations with a historical perspective.

Manys a welfare schemes and developmental initiatives have been implemented during this three year tenure. Many are on the anvil. The Ministers are striving their best to

keep the wheels of development rolling. Deadlines have been set for all important announcements for completing them within a stipulated time. By announcing Mission 676, the UDF government has once again upheld its responsibility to the public. It is easy to announce projects, but only a people-friendly government can take the responsibility of implementing them in a time bound manner. Dividing the supervision to respective ministries and taking the overall supervision and responsibility by himself, our Chief Minister becomes a model to the whole country as it is a novel initiative.

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PRINTING

Orange Printers Private Ltd.

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Kerala Blasters will train young footballers

"The state government and the people of Kerala are all excited about Sachin's initiative and the government will extend all support to Tendulkar's team," said Chief Minister Oommen Chandy after the meeting with Sachin Tendulkar, who visited him in sought of support for his Soccer Team. The Chief Minister also announced that the Kerala Blasters will train around 1,25,000 young footballers from the state in the coming months as part of its grassroots development programme.

Earlier while announcing the name of his team, Tendulkar said, "We decided to name the Kochi team as Kerala Blasters Football Club and one can say there is an association because I am known as the master blaster. The 'Kerala' in the name is because that though we are based in Kochi, the team is dedicated to all the football fans in the state and the team needs their support,"

Tendulkar said that he hopes to bring back the golden days of Kerala football but added that things will not change overnight. "I

remember in the 1980s and 90s, we had a lot of Kerala footballers in the national football team but now we do not have any. With ISL, we aim to change that," he said.

Sachin Tendulkar also accepted the Chief Minister's request to be the goodwill ambassador of the 35th National Games scheduled to be held in the state in January next year. "It is a huge honour and I will be more than happy to accept the role of the goodwill ambassador and promote sports in the country," said an excited Tendulkar.

Rehabilitation Programme for Expatriates Soon

The government has decided to launch a comprehensive rehabilitation programme, giving thrust on subsidised self-employment schemes for Malayali expatriates returning to the state, said Minister for Cultural Affairs and NORKA, K C Joseph. The programme is envisaged to be implemented under the Chief Minister's 'Mission 676'.

"As part of the programme, low interest loans and subsidies will be provided to the returnees to start business ventures. The government will meet the capital subsidy and interest subsidy of the schemes. The project mainly targets the rehabilitation of Gulf returnees in the wake of the recently announced 'Nitaqat' law in Saudi Arabia, a new labour law which had affected



thousands of Malayalees working there. At least 50 entrepreneurs from each district

would get loans within 100 days," the Minister said.

With the support of the local banks, adalats would be organised at the district level to provide loans for all deserved expatriates. A total of Rs 50 crore would be spent for the programme in the initial phase. The Non-resident Keralites Affairs (NORKA)'s advisory committees would be formed in various countries--first in Gulf countries and later in other parts. Steps will also be taken to provide legal assistance to Keralites who are punished for minor offences in Gulf countries. The government will join hands with the Indian Embassy and various expatriate organisations for that," the Minister added.



Hon'ble Governor Sheila Dikshit planting a sapling at Rajbhavan on World Environment Day

NBFC's told to follow fair practice

Non-banking financial companies (NBFCs) in the state were asked to follow the Fair Practice Code stipulated by the Reserve Bank of India (RBI) last year. They would face action if they failed to comply with the code, said Home Minister Ramesh Chennithala. The police had found that none of the companies, including the big ones were following the code. If they failed to follow the code, the police would raid their premises and take action under the Kerala Prohibition of Charging Exorbitant Interest Act. Besides, the RBI would be requested to take steps to enforce its guidelines, the Minister said.

The code required the NBFCs to fix their interest rates taking into consideration the risk profile, cost of funds and other factors and publish them on their website and newspapers. They were also to follow appropriate internal procedures. It was illegal to obtain signed plain paper, stamp paper or blank cheques from customers. The director boards of the companies were currently free to fix their interest rates. So, the government would urge the RBI to bring about checks on interest rates, the Minister added.

Under the project, four-lakh seedlings were planted in different parts of the district during the green hour starting 10.30 a.m. on the World Environment Day. This year's target under the scheme is to plant 10-lakh

seedlings in the entire State. The CM said that the world had become more sensitive towards the problems of nature and environment. "In 1960's and 70's deforestation was a major issue of concern. Hunting of wild animals was rampant. But things have changed for good. Today, there are no complaints of deforestation or major issues of animal poaching reported. Instead, afforestation has become a major movement," the Chief Minister said. Rural Development Minister K C Joseph presided over the function.

Banks to offer loans to usury victims

Commercial banks may offer loans of up to Rs.50,000 to victims of moneylenders to free them from the clutches of the so-called blade mafia. A recommendation to this effect was made by a subcommittee formed by the State Level Bankers' Committee and the banks were expected to launch such a scheme in a week's time, Home Minister Ramesh Chennithala said.

The scheme would enable the common man to pay up high-interest loans taken from registered moneylenders, stock brokers, and others. The beneficiary would be required only to produce photocopies of documents and a certificate from a government official regarding their debts and sources of income. The bank would directly pay the moneylender from the proceeds of the loan. The loan would be repayable in five years and would carry only the base rate of interest.

The Minister said he would soon write to the banks to enhance the loan amounts to Rs.1 lakh. Mr. Chennithala said the government was intensifying action against the blade mafia. Strong action was also contemplated against use of drugs which was increasing in the State. He said that more than 1,000 cases had been registered and 586 persons arrested as part of the fortnight-long Operation Kuberan against blade companies.

Haritha Keralam Launched

"If development is the need of the day, environment protection is for tomorrow. Forgetting the future and the survival of the coming generations will be disastrous," said Chief Minister Oommen Chandy while inaugurating the ambitious green drive, Haritha Keralam, the participatory environment action programme in connection with the World Environment Day observance. The developmental needs of the present should not be in total disregard for the environmental protection essential for the survival of future generations. Though measures for the protection of the environment sometimes caused difficulties to the people, it cannot be ignored.



Flagship programme to revive coconut sector

Ten lakh coconut trees of the dwarf variety would be planted across the State by February 2016 under a flagship programme to revive the coconut sector and address the shortage of tree climbers, Minister for Agriculture K P Mohanan said. The Neera production plant being set up at Elathur in Kozhikod by the Kerala State Coconut Development Corporation was expected to be commissioned by December 2015. The plant would have a capacity to produce 1,000 litres of Neera a day.

The action plan includes a variety of schemes aimed at making Kerala an organic farming state by March 2016. The programme seeks to bring 3,000 sq m under polyhouse method of horticulture at Vadavathur in Kottayam and Kodumon Estate, Pathanamthitta by November this year. The State Horticulture Mission will take up a project to set up 1,28,000 sq m of polyhouses and introduce organic certification in 3,500 hectares. Cluster units will be set up in Kannur, Wayanad, Idukki, and Palakkad to extend vegetable farming to 3,900 hectares, said the Minister

As many as 2,00,000 milch cows will be added to the cattle population while the annual production of fodder will reach 44 lakh tonnes. Three new dairy farms are to be set up at Enmakaje, Kottoor and Muthalappara in Kasaragod district. Two new hi-tech dairy farms are expected to be commissioned at Vithura in Thiruvananthapuram and Kuriyottumala in Kollam by August 2015, the Minister said.



Students of Virginia University interacts with CM

Karunya Kerala scheme will be launched soon

Karunya Keralam, a project to provide free diagnosis, treatment, and medicines to all those who chose to go to government hospitals, will be taken up under the Mission 676 initiative, Health Minister V.S. Sivakumar has said. The medicines were already being distributed free-of-cost at hospitals. Clinical and scanning tests and all surgeries, except organ transplant, would also be made free in government hospitals. The 108 ambulance service would be extended across the State by launching

283 vehicles with advanced life-support systems and 287 vehicles with patient-support mechanism. Hospitals for women and children would be set up in districts without the facility. A cancer institute would be set up in Kozhikode at a cost of Rs.45 crore, the Minister said.

Laboratories would be set up in all public health centres and CT scan facility would be provided at all district and general hospitals. Casualty would be set up at taluk hospitals which do not have the system at present. A new dental college and a

cochlear implant unit would be set up at the Medical College Hospital (MCH), Alappuzha. Construction work of the Dental College, Thrissur, would begin next year. A cardiology intensive care unit with 12 beds and a liver transplant unit would become functional at MCH, Thiruvananthapuram. District early intervention centres were being set up under the Rashtriya Bal Swasthya Karyakram to detect congenital diseases in children. Such centres would be set up in all districts under the programme, the Minister added.



Home Minister Ramesh Chennithala interacts with District Police Chiefs through video conferencing



Cultural Minister KC Joseph interacts with the participants of 'Mambazhakkalam' Camp conducted by Vylloppilli Samskrithi Bhavan

Camp Sitting of Consumer Forums

The government will soon conduct camp sitting of the Consumer Dispute Redressal Forums in Thrissur, Thiruvananthapuram and Kozhikode, said Civil Supplies and Consumer Protection Minister Anoop Jacob. The decision was taken after the camp sitting conducted at Muvattupuzha turned out to be successful. "The dearth of adequate number of Consumer Protection Officers (CPOs) in the forums has been literally effecting their smooth functioning. Hence, the Civil Supplies and Consumer Protection Department will discuss the issue with the Home Department at the earliest. If any of the existing member of a forum retires there will be no delay in appointing a new member. The government had also asked for Central aid to strengthen the consumer forums in the State," the Minister said.



Minister for Agriculture KP Mohanan at Mango Fest 2014 stall

Housing Scheme for STs

The comprehensive housing scheme for the scheduled tribe in the state will be completed in two years by incorporating it in the recently launched Mission 676, said Minister for Welfare of STs P K Jayalekshmi.

"The Government will provide financial aid of Rs 2.5 lakh for each scheduled tribe family to build house. There are 12,935 homeless families in state as per the ST survey of 2008. The construction of houses for the rest will be completed in 676 days. Financial aid will be given to 1,000 families for renovation of houses," the Minister added.

Students will be deployed as 'eco-cadets'

"Students will be deployed as 'eco-cadets' to create environmental awareness. Over 1,000 students will be trained during summer vacation in the wildlife sanctuaries of the

State. 'Budding birders' project will be launched to promote bird and butterfly watching among students, said the Minister for Forests and Transport Thiruvanchoor Radhakrishnan while unveiling the projects under Mission 676.

A primary environment care project with the cooperation of grama panchayats; Rs.259-crore 'Krishi Raksha' scheme to protect crops from wild animals; forest academy at Arippa; and 'Urinunaru Kadinunaru' for the development of Adivasi settlements are among the projects identified by the Forest Department for implementation under Mission 676, the Minister said.

A Rs.15-crore project will be launched to conserve water in the catchment areas of rivers and forests during the summer. The Rs.725-lakh project for Adivasis would benefit one lakh tribes people. Protection of sparrows at grain markets would be taken up across the State as the project in the capital city had been found to be successful. A zoo being set up with international standards in Thrissur would become functional in 2016, the Minister added.



Minister for Panchayats and Social Welfare Dr. MK Muneer inaugurates the State Level Consultation on missing children and track child system



Ronald Dahl, the British author who is famous for writing children's fiction, was spot on when he said, 'It's a funny thing about mothers and fathers. Even when their own child is the most disgusting blister you could ever imagine, they still think that he or she is wonderful.' Humorously put, but that's true parental love for you – absolute, unselfish and unconditional. Of course not all parents love their children this way. It takes all sorts to make the world and there is God's plenty among parents too. Unfortunately there are parents who are cruel, sadistic, uncaring and selfish – parents who go against nature's laws. When a special day was set aside by the United Nations to celebrate parents, it was not such parents that the General Assembly had in mind but the normal, responsible parents who care about their

If there can be a Mother's Day and a Father's Day, what is wrong with combining the two to have yet another celebratory Day – the Day of Parents? A global day for celebrating parents is perfect, let the whole world take part in celebrating the two people whose efforts go largely unappreciated but who need to be recognised and lauded for playing pivotal roles in every family.





children and therefore take care of them.

The Global Day of Parents, proclaimed by the UN General Assembly in 2012 and observed on the 1st of June thereafter, was a late arrival on the UN calendar of special Days but a welcome one all the same. If there can be a Mother's Day and a Father's Day, what is wrong with combining the two to have yet another celebratory Day – the Day of Parents? A global day for celebrating parents is perfect, let

the whole world take part in celebrating the two people whose efforts go largely unappreciated but who need to be recognised and lauded for playing pivotal roles in every family. The Global Day for Parents therefore provides an opportunity to appreciate all parents in all parts of the world for their 'selfless commitment to children and their lifelong sacrifice towards nurturing this relationship.'

In its resolution, the General Assembly also noted that the

family has the primary responsibility for the nurturing and protection of children. A family environment and an atmosphere of happiness, love and understanding are essential for the full and harmonious development of the personality of the children.

The father, donning the all important role of bread winner and therefore considered the head of the family, has a very responsible position to play in this set up. The mother banks on

him to take the important decisions and the children look up to him as the person to emulate. Traditionally he has been given the authority to lay down the rules and maintain discipline. What that has done is to give him the power that can make him authoritarian and often so tyrannical that his children fear rather than respect him. They keep their distance and often do not go to him with their needs or their problems, thus increasing the burden on the mothers.

Parenthood

Guiding the next generation and forgiving the last

In modern society, with its focus on getting both parents to share the responsibility of rearing their children by taking care of their material as well as emotional needs, the father's role has been remodelled into that of a co-parent. Research has revealed that active involvement by fathers in the rearing of children is greatly responsible for their all

zone.

This leads to shows of anger, resistance and domestic violence; the mothers are often the targets, the children are the mute witnesses. Soon the children themselves become the victims of violence. The damage this does to children is enormous; the physical and mental abuse scars them



underachievers in school, if they don't drop out altogether. They resort to deviant behaviour that often tragically leads to crime or alienation and depression.

Not all families where the mothers are in complete charge have fathers who have abandoned them. Necessity, like

As for mothers, their job does not end with giving birth to their children; it is after this that their responsibilities multiply. It is taken for granted that they cook, feed, clothe and give their children emotional support. Once the women started going out to become bread winners themselves, their burden increased. They were expected to work outside the home, but take care of everything inside it too. They rose to the challenge but after a point, resentment seeped in and began to wreak some damage on their ties with their children. There is no substitute for a gentle and loving mother-child relationship. It can go a long way in ensuring that the child grows up to become a healthy and balanced adult; but when it is affected, the repercussions are tragic.

Women continue to face any number of challenges in motherhood, right from the kind of natal care given to them to facing domestic abuse and

a job in another city or country, often forces a separation with the family. This also has repercussions, but at least the children do not feel deserted and their fathers do try to remote control them and when they visit them, make it a point to spend quality time with them.

Education for girls and women will give them a sense of self worth while empowering them. Governments should give priority to control and end mindless violence against women by spreading the message of human rights.

round development. But this is easier said than done. Too many fathers, comfortable in their positions of power and authority, hesitate to shed these and become more participatory in the lives of their children. They resent this added responsibility as an intrusion into their comfort

emotionally for life. Some fathers also shirk this extra responsibility thrust upon them by taking the easy way out and abandoning the family altogether, thus transferring all the burden of raising the children on the mothers. Children raised in such homes often become



violence; not to mention the irrational quantum of work they are expected to do just because they are women and mothers. This is where education can play a role. Education for girls and women will give them a sense of self worth while empowering them. Governments should give priority to control and end mindless violence against women by spreading the message of human rights.

And men should also be educated about respecting women and taking an equal share in the responsibility of looking after the children and their homes. If there is greater access to education, it is not only individual families that will benefit, but the benefits will spread to the society and go on to help in the development of whole countries. Men must emerge as positive father figures in families. If fathers and mothers work together as responsible parents, without doubt their children and society will prosper.

In modern society, with its focus on getting both parents to share the responsibility of rearing their children by taking care of their material as well as emotional needs, the father's role has been remodelled into that of a co-parent. Research has revealed that active involvement by fathers in the rearing of children is greatly responsible for their all round development.

It is with the desire to honour parents the world over and not take them for granted while reminding them at the same time of their responsibility towards their families that the Global Day for Parents was proclaimed by the UN General Assembly on September 17, 2012. The Resolution recognised the role of

parents in the bringing up of their children and invited the member states of the UN to 'celebrate the Day in full partnership with civil society, particularly involving young people and children.'

Celebrating this day has special significance in the present day scenario where the concept of family itself is under threat. In a

world where gadgets have taken centre stage, children too do not seem to have much time for parents, often going to the extent of regarding them as an embarrassment or a nuisance. The observance of Global Day for Parents will force parents back into the consciousness of children and make them aware of their importance - the vital place they inhabit in their world and the vital role they play in their lives. Let parents also be well up to the challenge in the humorous assertion that 'parenting is a stage of life's journey where the milestones come about every fifty feet.' And take joy in it. ■

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The UDF Government has devised a string of schemes to be implemented in the remaining 676 days of the government. The programmes planned are to be completed in a time-bound manner with the Chief Minister and other departmental ministers taking charge of the schemes.

The Government of Kerala has gone past the three-year milestone successfully. In its three-year tenure the government tried its best to keep up the word given to the people three years ago. This people-friendly government had implemented many welfare schemes and developmental initiatives for paving the way for a progressive society and growth-oriented economy.

As per the mission, the ministers and department officials has geared up for ensuring that the progress of overall development reaches all sections of people in the State. They are well sure of the limited resources and time at their hands in making it a success. Deadlines have been set for all of the programmes under Mission 676.





Rolled Out

'Mission 676' will be implemented in five ways

1. Major development projects will come under the banner of 'Navaratna' projects and are to be monitored directly by the chief minister. These projects, which have the potential to give a fillip to the infrastructure growth of Kerala are at various stages of development; most of which are slated for completion within the next two years.

2. There are 30 development, welfare and service missions, which are to be implemented in a stipulated period under the supervision of ministers of respective departments. There will be other projects in order to make each mission a successful one.

3. Apart from the above-

mentioned projects, other projects will also be implemented with the ministers concerned and their departments after giving shape to a well-planned blueprint.

4. A five-point programme will be implemented with the chief secretary in charge to make the services of the government quick and efficient.

5. Other Projects will be implemented under the guidance of the Planning Board vice-chairman for the implementation and formulation of the yearly schemes.

NAVARATNA Projects

Projects	Minister-in-charge
Koch Metro	Minister for Power
SmartCity	Minister for IT & Industries
Vizhinjam Harbour	Minister for Fisheries, Ports and Excise
Kannur Airport	Minister for Fisheries, Ports and Excise
National Waterway	Minister for Water Resources
Thiruvananthapuram, Kozhikode monorail	Minister for PWD
Suburban Railway	Minister for Power
Upper-level transport development including National Highway	Minister for PWD
Student Entrepreneurship Programmes	Minister for IT & Industries

Kochi Metro

It was in the year 2004 that the Metro project in Kochi was conceived and taken forward. Eight years later, in 2012 the then prime minister Manmohan Singh inaugurated the project and laid its foundation. The work commenced in June of 2013 and within a record time, the bridges in North and Salim Rajan road were completed. Aid worth Rs 1600 crores as French loan and Rs 1170 crores as loan from Canara bank were made available. Further, the remaining land procurement procedures, the traffic congestion caused in the city due to construction activities were sorted out in a higher-level meeting held in May. The work of the project is progressing on a record pace and the first Metro train is expected to run by December 2015.



Vizhinjam Port

A project that has been long delayed, eventually picked up momentum with the arrival of the UDF government three years ago. The tender procedures of the project are already on the anvil and the project partner is to be finalized by August 2014. The port on completion will contribute appreciably to the economy of the State and is well poised to provide a great leap in the vessel transportation in the country.

Kannur Airport

The work on runway has already commenced and the construction works of the terminal will begin in July 2014. As things stand now, the maiden flight to Kannur Airport will make its touchdown in December 2015.

National Waterway

The Kollam-Kottappuram national waterway that was announced in 1993 will be completed by this year. The realization of this national waterway would lead to sustained efforts for the commencement of Kovalam-Neelaswaram.

SmartCity

Going on a good pace, the first building as part of the phase 1 of the SmartCity project with a work space of 6.5 lakh sq ft will be opened on 25 March 2015. The first phase of SmartCity project is expected to provide employment to more than 5000. The construction of the 30 lakh sq ft building will start this year itself.

TVM-KZKD Mono Rail

The tender procedures of the mono rail projects in Kozhikode and Thiruvananthapuram have been completed and the Revenue department has given the orders for land acquisition. It has been estimated that the construction of the project will start by November 2014.

Suburban Railway

Mumbai Rail Vikas Corporation, the agency appointed by Kerala government has submitted the Feasibility Study report on the proposed Rapid Rail Transit System (RRTS) from Thiruvananthapuram to Chengannur. The Rs 3330.78 crore worth RRTS project is cost-effective as it requires only the upgrading of existing railway network and does not recommend construction of a new rail corridor.



Upper-level Transportation including NH

Priority will be given in developing the 170 km long Cherthala - Kazhakkottam stretch of NH 47. Tenders for the project will be invited by November and the constructions would in January 2015. The construction of road viz. Valayar to Mannuthy and Kazhakkottam to Mukkola will also be undertaken on a war footing. The re-tendering procedures of Alappuzha and Kollam by-pass are also progressing.

Development and Welfare Missions

Projects	Minister-in-charge
Drinking Water to all	Minister for Water Resources
Zero-Landless	Minister for Revenue
House-to-All	Minister for Finance-Housing
Comprehensive Electrification	Minister for Power
Complete Digitalization of the State	Minister for Industries-IT
Nirbahaya Kerala	Minister for Home
Healthcare to all	Minister for Health
Everyday Goods at Fair Price	Minister for Civil Supplies
Expatriates' Welfare Scheme	Minister for NRI
New Projects in Education sector	Minister for Education
Farmer Welfare Projects	Minister for Agriculture
Clean Kerala	Minister for Town Planning
Environment Protection	Minister for Environment
Welfare Project for 725 Tribal Sects	Minister for Forests
Skill Development	Minister for Labour
Welfare Scheme and Debt Relief for Fishermen	Minister for Fisheries
Developing Villages	Minister for Panchayat and Village Development
Welfare Schemes for SC	Minister for SC
Complete Housing for ST- Rajiv Gandhi Grihasree	Minister for SC/ST
Speed Kerala	Minister for PWD
Youth Welfare Schemes	Minister for Youth Affairs
Cultural Programmes	Minister for Culture
Social Welfare Schemes for Differently-abled	Minister for Social Welfare
Welfare Schemes for the blind	Chief Minister
New schemes and interest-free loan in Co-operative Sector	Minister for Co-operation
Sabarimala Development	Minister for Devaswom
Capital City Development	Minister for Town
Drug-free Kerala	Minister for Excise
God's Own Country, People's Own Tourism	Minister for Tourism
National Games - 2015	Minister for Sports

Student Entrepreneurship Programme

A mission to help and encourage entrepreneurship among students, as part of the programme two hundred start-ups have come up within two years and the project has already bagged nationwide attention. Aided by the government, the programme also witnessed five young entrepreneurs visiting the Silicon Valley in USA as part of the project. More support will also be given to young woman entrepreneurs like giving them 5% extra grace mark. The project aims to achieve 2000 start-ups by February 2016, employment to 20,000 and a building of two lakh sq ft. ■

Translated by Adarsh Chandran



Raise your voice

How do humans affect our future environment? Who will be the most vulnerable? And: How can we help them? Every year on the 5th of June the World Environment Day focuses on these questions. In support of the UN's designation of 2014 as the International Year of Small Island Development States (SIDS), the WED 2014 highlight the threats of Climate Change for SIDS around the world. This year's slogan "Raise your voice, not the sea level", hence, asks for as many individual actions as possible from single, small decisions to big, extensive campaigns on environment and Climate Change.

Since 3,000 years before present, till the end of the nineteenth century (1900 AD), sea level was practically constant, and did not raise much. The rate of sea level rise during this period was a mere 0.1 to 0.2 mm per year. Since 1900 AD, however, sea level has been rising more rapidly, at the rate of 1 to 2 mm per year. These numbers in millimetre do not appear large and frightening, but when accumulated say over a period of a century they do assume a menacing proportion. In the early 1990s satellite altimetry was employed to very precisely record sea level rise. Results of satellite altimetry observations show that by 1993, sea level is rising at the rate of 3.1 mm per year.



not the sea level

An ice sheet is a mass of glacial land ice extending more than 50,000 square kilometres. The two ice sheets on Earth today cover most of Greenland and Antarctica. During the last ice age, ice sheets also covered much of North America and Scandinavia. Together, the Antarctic and Greenland ice sheets contain more than 99 percent of the freshwater ice on Earth. The Antarctic Ice Sheet extends almost 14 million square kilometres. The Antarctic Ice Sheet contains 30 million cubic kilometres of ice. The Greenland Ice Sheet extends about 1.7 million square kilometres, covering most of the island of Greenland. The ice sheet of Greenland and Antarctica, which if fully melted, would raise sea level by 64m.

The trend, linked to global warming, puts thousands of coastal cities, like Venice, Italy and even whole islands at risk of being claimed by the ocean. Over the past century, the Global Mean Sea Level (GMSL) has risen by 4 to 8 inches. The annual rate of rise over the past 20 years has been roughly twice the average speed of the preceding 80 years. Global average sea level rise of 26-59cm (10-23 inches) is expected over the next hundred years. This will be around two-thirds due to thermal expansion of the oceans

(water expands as it heats up) and one third due to melting.

Warming Oceans

There are three major processes by which human-induced climate change directly affects sea level. As climate change increases ocean temperatures, initially at the surface and over centuries at depth increases. The water will expand, contributing to sea level rise due to thermal expansion. Thermal expansion is likely to have contributed to about 2.5 cm of sea level rise during the second

half of the 20th century, with the rate of rise due to this term having increased to about 3 times this rate during the early 21st century. Because this contribution to sea level rise depends mainly on the temperature of the ocean, projecting the increase in ocean temperatures provides an estimate of future growth. Global warming caused by human activities that emit heat-trapping carbon dioxide has raised the average global temperature by about 1°F (0.6°C) over the past century. In the oceans, this change

has only been about 0.18°F (0.1°C). This warming has occurred from the surface to a depth of about 2,300 feet (700 meters), where most marine life thrives.

A second contributor to sea level rise is the melting of glaciers and ice caps. IPCC's Fourth Assessment estimated that, during the second half of the 20th century, melting of mountain glaciers and ice caps led to about a 2.5 cm rise in sea level. This is a higher amount than was caused by the loss of ice from the



Greenland and Antarctic ice sheets, which added about 1 cm to the sea level. For the 21st century, IPCC's Fourth Assessment projected that melting of glaciers and ice caps will contribute roughly 10-12 cm to sea level rise, with an uncertainty of roughly a third. This would represent a melting of roughly a quarter of the total amount of ice tied up in mountain glaciers and small ice caps.

The third process that can cause sea level to rise is the loss of ice mass from Greenland and Antarctica. If all the ice on Greenland melts, a process that would likely take many centuries to millennia, sea level would go up by roughly 7 meters. The West Antarctic ice sheet holds about 5m of sea level equivalent and is particularly vulnerable as much of it is grounded below sea level. The East Antarctic ice sheet, which is less vulnerable, holds about 55 m of sea level equivalent. The models used to estimate potential changes in ice mass are, so far, only capable of estimating the changes in mass due to surface processes leading to evaporation/sublimation and snowfall and conversion to ice.

A recent European Space Agency satellite has found that Antarctica has been shedding ice at an accelerated pace compared to when the continent was last surveyed, backing up other research that has detected similar trends. The new research, by a team of researchers in the U.K., used observations from the CryoSat-2 satellite to produce the first estimate of the volume and mass change of nearly the entire

Antarctic ice sheet. Three years of observations, between 2010 and 2013, from the CryoSat-2 satellite show that the Antarctic ice sheet is now losing each year, twice as much as when it was last surveyed during the 2005 to 2010 period. According to the study, the average elevation of the Antarctic ice sheet fell by 0.74 inches per year between 2010 and 2013. However, far more rapid rates of land elevation changes, which are a sign of a thinning ice sheet that is discharging more water into the ocean and thereby raising global sea levels, occurred in West Antarctica, the study found.

In West Antarctica, the satellite data shows a mass loss of about 134 billion metric tons of ice per year, which is 31% greater than over the 2005 to 2011 period. The Antarctic Peninsula, which is the fastest-warming region on the continent, has been shedding about 23 billion metric tons of ice per year, the study found. Changes in snowfall amounts have helped balance out some of the ice losses there and especially in eastern Antarctica. For Antarctica as a whole, the study found the current rate of ice sheet mass loss to be about 160 billion metric tons of ice per year. The extra water pouring into the sea is raising sea levels by about 0.1 inches per year, the study found. That may seem small at first, but over time, especially when combined with other sources of sea level rise such as melting Greenland glaciers and the expansion of seawater as ocean temperatures increase, it adds up.

In the case of Greenland, loss of between 50 and 100 billion tons of ice has taken place annually over the period 1993-2003 with evidence of higher rates more recently. The latest finding suggests that situation could be much worse. University of California Researches used airborne radar soundings and satellite data to show that beneath the glacial ice were

widespread melt events are likely to happen much more frequently in the future.

Islands – Climate change Canaries

While rising sea levels ultimately influence the entire planet, they pose the greatest threat to the island nations currently residing at sea level. Even lower projections for longer-term sea level rise would

Islands play a huge role in sustaining life on the planet – making up less than 5 per cent of Earth's landmass, they are home to 20 per cent of all bird, reptile and plant species.



valleys so deeply incised that some of them were hundreds of metres below sea level, at distances tens of kilometres from the sea. The researchers conclude that the outlet glaciers of Greenland, and the ice sheet as a whole, are probably more vulnerable to ocean thermal forcing and peripheral thinning than inferred previously from existing numerical ice sheet models. The glaciers of Greenland are likely to retreat faster and further inland than anticipated—and for much longer—according to this very different topography discovered beneath the ice.

But even before the warming seas start to lap at the rim of Greenland's icy mountains and melt the glaciers from beneath, global warming threatens the icecaps from above. In July 2012, more than 97% of the Greenland ice sheet melted at the surface. Researchers say that with both the frequency of forest fires and warmer temperatures predicted to increase with climate change,

wipe out more than 15% of Pacific islands, according to recent U.N. report. A comprehensive study of 12,983 islands of all sizes above 2.5 hectares across the Pacific Ocean, including the Philippines and Hawaiian Islands, found that some 15 to 62% of islands would entirely disappear under sea level rise ranging from 1 to 6 metres. A 0.5 to 2-metre sea level rise could displace between 1.2 and 2.2 million people from islands in the Caribbean, Indian Ocean and Pacific Ocean, before allowing for adaptation such as coastal protection. Coastal erosion, water resources and human settlement on Pacific small islands will be at increasing risk with changes in temperature, rainfall and sea level rise. While the international community remains divided about global warming, the island nations are living its reality. Some island nations most threatened by sea level rise are-

Marshall Islands

This island with a population of over 50000 is halfway between

Hawaii and Papua New Guinea. The highest point on the 29 atolls and five islands is 33 feet (10 meters) above sea level. The capital, Majuro, is just three feet above sea level. Parts of the islands lie just 30cm above water, and a sea level rise of 80 cm would inundate two-thirds of the islands. This is a scenario, which could occur by the end of the century, according to the UN's climate science body.

Nauru

Nauru, which on satellite imagery looks like a white pebble in the deep blue expanse of the Pacific, is eight square miles and has a population of some 10,000, almost all of whom live on the coastline. The highest point is 200 feet above sea level, but the effects of phosphate mining have ravaged much of the interior. And the nearest neighbors are 180 miles away. Land was inundated by high tides four years ago.

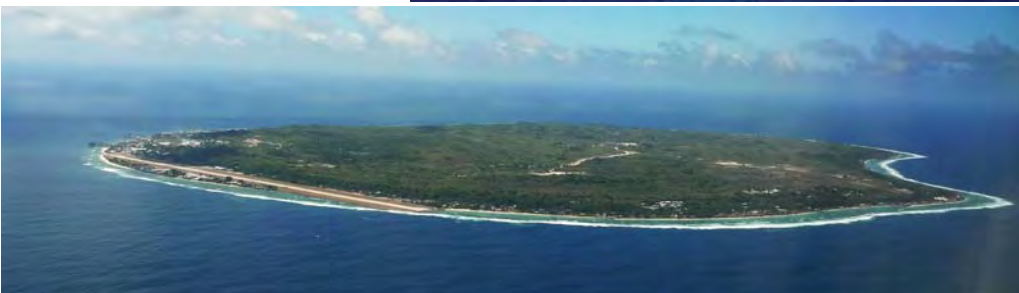
revealed a plan to buy nearly 6,000 acres on Viti Levu, Fiji's main island to move the entire population off of Kiribati in case of emergency.

Republic of Maldives

The Maldives comprises 1,190 islands and atolls in the Indian Ocean. The highest parts of the Maldives rise to no more than 8 feet. This leaves its nearly 400,000 residents at great risk of storm surges and rising seas. As the flattest country on Earth, it is extremely vulnerable to rising sea level and faces the very real

relocate to Fiji, as this 7,056-square-mile island nation in the South Pacific is to face the challenges of climate change.

have drastically increased in Palau. As a result of warming sea surface temperature in 1997 and 1998, mass coral bleaching



Republic of Kiribati

The Pacific Ocean holds the nation of Kiribati, a 266-square-mile republic on 32 atolls and one island. With a population of 102,697, the rising sea has already overtaken entire villages, contaminated freshwater resources, and invaded the landscape - rendering once farmable land useless. Most of the island nation does not lie more than 3 meters above sea level. Recently, President Anote Tong

possibility that the majority of its land area will be underwater by the end of this century. The island received considerable damage in the December 2004 Indian Ocean tsunami. The Maldivian government has identified many potential strategies for adapting to rising seas, but is also considering relocating its people to a new homeland.

Republic of Fiji

The people of Kiribati may want to rethink their plans to

While its larger islands contain mountains as high as 4,000 feet above sea level, Fiji is still concerned about the effects of climate change. Climate change is expected to influence extremes of too little and too much water in the form of severe storms and droughts. Such extreme weather is expected to make the island's population of 851,745 more sensitive to climate-sensitive diseases, such as water-borne illnesses.

Republic of Palau

The Republic of Palau is the westernmost of the Micronesian nations, located relatively close to the Philippines and Indonesia. In the last decade, major environmental problems and threats related to climate change

occurred. Approximately one-third of Palau's corals died. This had severe, adverse impacts on the nation's important marine tourism industry. Sea level rise in low-lying areas is a threat to coastal vegetation, agriculture, and the purity of the nation's water supply. Palau, which has roughly 20,000 citizens, is already active in other eco-arenas and is home to the world's first national shark sanctuary.

Federated States of Micronesia

Micronesia consists of 607 islands containing both mountains and low-lying coral atolls in the Pacific. It lies 1,800 miles east of the Philippines. This 270-square-mile nation holds a population of 102,624. With the Federated States of Micronesia facing increasing temperatures, rainfall and sea levels; islanders are looking for ways to secure the quantity and quality of their food supplies. "The threat is to our existence, survival, not only as a people - as a culture. ... We now





Sea level Rise and India

Mainland India, endowed with a long coastline of 5,700 km will not escape the rage of the seas. The total length of the Indian coastline is much longer at 7,500 km when all the island territories of Andaman and Nicobar, and Lakshadweep are taken into account. A 1 m rise in sea level by 2100 AD will practically submerge the entire Lakshadweep group of islands. In mainland of India, where in the absence of any preventive measures, a 1 m rise in sea level would inundate 5,763 square km of coastal land, and render 7 million people homeless. The northern most part of the east coast of India, where the many distributaries of the Ganges and the Brahmaputra have created the largest delta of the world, which is barely above sea level, is the highly vulnerable. Bulk of this Ganges-Brahmaputra deltaic system is situated in Bangladesh, and the rest in the Indian state of West-Bengal, which thus is the most vulnerable state in India.



have just flat beaches - the wash comes in and hits the roots of coconut trees," Masao Nakayama, permanent representative of the Federated States of Micronesia to the United Nations, said in 2009

Republic of Cape Verde

The Cape Verde Islands are located some 300 miles off the west coast of Africa. An archipelago of 10 islands and five islets, it holds a population of 516,100. In 2011, diplomats, legal

scholars and other experts met at Columbia University Law School in New York City to discuss the fate of the Republic of Cape Verde and other island nations. One of the main issues discussed was the responsibility of the greatest greenhouse emitters — such as the United States and China — to the nations that may soon disappear into the seas. Ambassador Antonio Lima of the Cape Verde Islands pointed out that the largest nations would

condemn themselves to the same fate if they continue to ignore this crisis.

Flooding Coastal Nations

The immediate effect of sea level rise is submergence and increased flooding of coastal land, as well as saltwater intrusion into surface waters. Longer-term effects that occur as the coast adjusts to new environmental conditions include wetland loss and change in response to higher water tables and increasing salinity, erosion of beaches and soft cliffs, and saltwater intrusion into

move natural protection and hence increase the likelihood of coastal flooding. Extra tropical storms may also intensify in some regions. Changes in mean sea level will also change surge propagation, which could have additional significant effects (positive or negative) on extreme sea levels. Changes in natural systems resulting from sea level rise have many important, direct, overwhelmingly negative socioeconomic impacts on a range of sectors. For instance, flooding can damage coastal infrastructure,



According to the UK Royal Society a one-metre sea level rise could flood 17 percent of Bangladesh, one of the world's poorest countries, displacing tens of millions of people and reducing its rice-farming land by 50 percent.

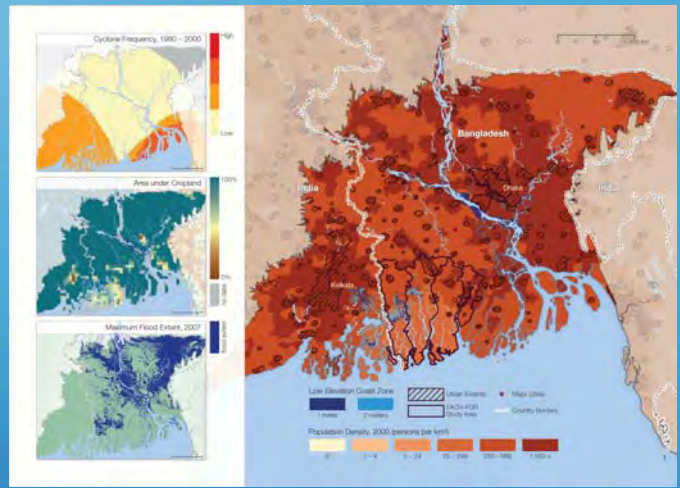


groundwater. These lagged changes interact with the immediate effects of sea level rise and generally exacerbate them. For instance, erosion of sedimentary features (e.g., salt marshes, mangroves, sand dunes, and coral reefs) will tend to degrade or re-

ports and industry, the built environment, and agricultural areas, and in the worst-case lead to significant mortality as shown recently in Hurricane Katrina.

In addition to these direct impacts, there are potential indirect impacts such as adverse

The riverine Orissa that lies immediately to the south of West-Bengal is also very vulnerable. Further south along the east coast appear the huge deltas laid by the Godavari and Krishna river systems, and the Penner river in the state of Andhra Pradesh, followed by the Cauvery delta of the southernmost state of Tamil Nadu. All these low-lying deltas are vulnerable to flood when sea level rises. Although the west coast of India does not host large deltas, is not immune from the threats of sea level rise. Kutch region of Gujarat, greater Bombay and southern parts of Kerala will be utterly devastated by the rising seas. A 1 m rise of sea level will inundate 1,810 square km of land in Gujarat, 1,220 square km in West-Bengal, 670 square km in Tamil Nadu, 550 square km in Andhra Pradesh, 480 square km in Orissa, 410 square km in Maharashtra, 290 square km in Karnataka, 160 square km in Goa, and 120 square km in Kerala.



Ecosystem Impacts

The rate of sea level rise will hamper the successful migration of a number of organisms.

Coastal development also creates obstacles to plant and animal life as they are trying to adapt to changes in the ecosystem. For example, in Bangladesh and Thailand, coastal wetlands and mangrove forests, which act as buffers to storm surges and tidal waves, are already being submerged by rising sea levels. The mangroves would normally re-establish themselves at the new low-tide zone; however, buildings and other types of development on the coast are blocking them.

Corals are dependent on light to maintain their biological functions. A rise in sea level will cause reef ecosystems at the depth limit of coral growth to experience diminished light conditions that will no longer sustain this growth and will most likely result in death. Corals that currently exist at these depths are expected to go extinct with rising sea levels.

These changes in coastal and terrestrial ecosystems and resources will consequentially impact ocean circulation as well as sediment and nutrient flow in coastal areas.

effects on human health, for example, the release of toxins from eroded landfills and waste sites or mental health problems triggered by floods. Already, coastal zones are experiencing contamination of groundwater resources and aquifers such as in Tuvalu. Flooding, both permanent and intermittent will allow diseases such as cholera and malaria to extend their ranges further inland. More frequent and intense severe storm events such as hurricanes and monsoons will also increase the number of cases and occurrences and duration of exposure to pathogens and diseases. These indirect impacts are little researched, but will have economic consequences in terms of the damages caused. Thus, sea level rise has the potential to trigger a cascade of direct and indirect human impacts.

It is not only Small Island states that need to worry about sea level rise. Sea level rise increases the risk of both temporary and permanent flooding of coastal lands. Around 23% of the world's population lives in the near coastal zone with population densities about three times higher than the global average. The concentration of population and assets, including many major cities, along the coasts already make them "risky places," exposed to multiple meteorological and geophysical hazards, such as storms and storm induced flooding.

Globally, it is currently estimated that as many as 20

million people live below normal high tide levels, while over 200 million people are vulnerable to flooding during temporary extreme sea level events produced by storms. Wholesale and partial relocation of populations living in severely affected areas such as Tuvalu, Bangladesh, and Samoa has already created climate change refugees. Other areas where populations may need to be relocated include Bangladesh, the Maldives, Guyana, and the Netherlands. In areas where sea level is not projected to rise as fast, vast infrastructure projects have been put into place to lessen the impacts of rising sea levels such as in the Netherlands and London.

A little bit of sea level rise could go a long way to increasing flood risk for the globe's coastal cities. New research finds it's possible to reduce that risk, but not make it disappear completely. If current warming trends are allowed to continue, London, Bangkok and New York, Shanghai and Mumbai will be among a number of cities, which will eventually end up below sea level - displacing millions and causing massive economic damage. Most of the globe's economic activity is funneled through cities that will be fighting to stay above water. Imagine a world without Shanghai, Mumbai and Boston, a world in which London and New York are risky settings for markets. There comes a point at which, building higher and higher sea defenses becomes

impractical, and even the wealthiest nations will see cities flood. It also finds that cities not typically thought of as hot spots for sea level rise and flooding will actually be some of the biggest losers in a soggy future. Among the cities with the 10 highest flood costs by 2050 are Kolkata and Mumbai. Among the runner ups is Chennai.

Mitigation and adaptation

The two potential responses to sea level rise are mitigation and adaptation. They operate at very different scales: mitigation, by necessity, is a global-scale activity linked to climate policy, while adaptation is a local-to-national activity linked to coastal management policy. Hence, our understanding and assessment of responses to sea level rise also need to operate at multiple scales.

Mitigation can slow the rise in sea level and reduce its impacts, and given its strong inertia, mitigation has an important additional effect of stabilizing the rate of sea level rise rather than stabilizing sea level itself. But, sea level rise will continue and will remain a challenge for generations to come. The fundamental goal of mitigation in the context of coastal areas is to reduce the risk of passing irreversible thresholds concerning the breakdown of the two major ice sheets, and constraining the commitment to sea level rise to a rate and ultimate rise that can be adapted to at a reasonable economic and social



Sachin
Tendulkar's
Kerala Visit



Eco Regions loosing to Sea



A report published in the latest issue of Journal of Threatened Taxa, Prepared by a group of ecologists' presents an overview of the potential consequences of 1m and 6m sea-level rise for coastal conservation areas on the Indian sub-continent. Under the 1m sea level rise scenario, estimates of eco-region deluge range from 19 per cent to 59 per cent. While under the 6m sea-level rise scenario, estimates of eco-region deluge range from 27-58 per cent. Under the 1m sea level rise scenario, the Godavari-Krishna mangrove eco-region is predicted to lose more than a one third of its area, while the UNESCO World Heritage site of Sundarbans in West Bengal is predicted to lose more than half of its area. While under the 6m sea level rise scenario, three eco-regions (Sundarbans freshwater swamp forests, Andaman Islands rain forests and Maldives Lakshadweep-Chagos Archipelago tropical moist forest) are predicted to lose more than a quarter of their land areas. Three more (Sundarbans mangroves, Godavari-

Krishna mangroves, and Rann of Kutch seasonal salt marsh) are predicted to lose more than half of their land area. Seven protected areas – Bhitarkanika, Chilka Lake, Point Calimere, Interview Island, Lothian Island, Sajnakhali and Pulicat Lake – are expected to experience more than 50 per cent inundation under 1m sea level rise, and an additional four protected areas – Kach Desert, Velavadar, Pulicat, and Nal Sarovar – join this list under 6m sea level rise. Out of the 22 coastal conservation areas, nine will be spared from the effects of marine intrusion under 1m sea-level rise, but only one will be spared under a 6m sea-level rise scenario, says the report. Hundreds of species of flora and fauna, including globally threatened species, depend upon low-lying coastal ecosystems for their survival. Several important biodiversity areas, including in particular protected and non-protected IBAs (Important Bird Areas) in the Bay of Bengal and Arabian Sea have already been stressed by numerous anthropogenic impacts as well as by invasive species.

cost. Mitigation of human-induced subsidence needs to be considered in susceptible areas. Such mitigation includes measures to control/reduce groundwater extraction and manage water levels, and these measures have been successfully implemented in a number of cities and delta areas to date. However, this strategy is not being transferred elsewhere in proactive manner.

Adaptation can be classified in a variety of ways. One widely followed approach is the IPCC typology of planned adaptation strategies which include Planned Retreat (All natural system effects are allowed to occur and human impacts are minimized by pulling back from the coast via

land use planning, development controls, and other means.), Accommodation (All natural system effects are allowed to occur and human impacts are minimized by adjusting human use of the coastal zone via flood-resilience measures, such as warning systems and insurance.) and Protection (Natural-system effects are

Controlled by soft or hard engineering like nourished beaches and dunes, or seawalls, thus reducing human impacts in the zone that would be impacted without protection.).

Reducing our emissions would help slow the rate of sea-level rise — but at this point, it's unlikely that we could stop further raise completely. That's

the upshot of a recent study from the National Centre on Atmospheric Research (NCAR). The study estimated that aggressive steps to cut emissions could reduce the amount of sea-level rise by somewhere between 6 and 20 inches in 2100, compared with our current trajectory. That's quite a bit. But sea levels will keep rising for centuries no matter what we do. The carbon dioxide that we've already loaded into the atmosphere will likely have effects on the oceans for centuries to come. But with aggressive mitigation, we can slow down the rate of sea level rise, which buys time for adaptation measures. ■

The writer is Deputy Director, Agriculture Department

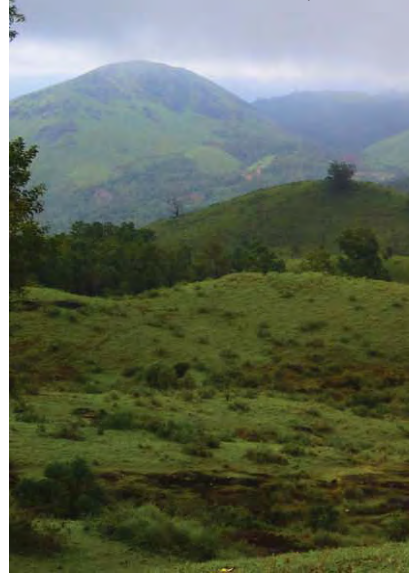


Vag

The charm of Vagamon is worth experiencing and is indeed one of the must see places

Its position in the Western Ghats itself makes it one among the must see places in Kerala. An ideal getaway with its own charm and relaxed ambience offers a very spectacular view of the Western Ghats with an ethereal touch. Cuddled up within three prominent hills -Thangal, Murugan and Kurisumala- which are accounted for three main religions in Kerala, i.e. Hindu, Muslim, and Christian, Vagamon showcases secularism at its fathom.

The hill station is located along the Kottayam-Idukki border of Kerala with cool-pristine climate to stay in summer. Reaching Vagamon itself is an extraordinary



agamon

Vagamon - a land of unexplored mountains and valleys with exquisite green meadows, enchanting pine forests, mist clad mountains, sprawling tea estates, amazing waterfalls and everything to enchant a traveller with its breathtaking beauty.

experience. The winding road to Vagamon is cut in solid rock lined with pine forests. As you trek your way through lush mist clad hills, the view of the meadows thousands of feet below are exquisite.

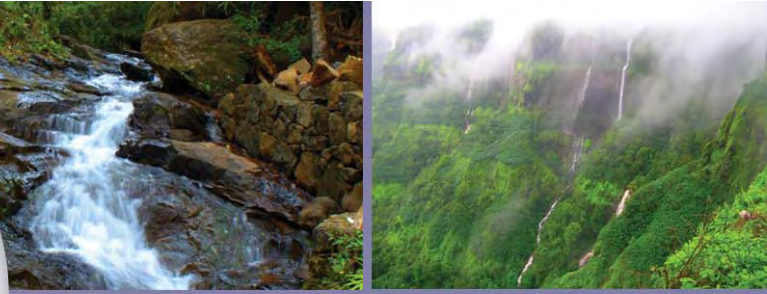
The road to vagamon from Erattupetta opened an easily accessible and direct route to Vagamon from the plains. The foot hills on its lower side reach up to Teekoy and this narrow strip of descending land gives a connectivity to the plains as both sides of Vagamon up to Kuttikkanam on the south west and Moolamattom on the north east, are marked by steep and inaccessible hill slopes. Travelling by the hill highway in this section is an exciting experience with deep valleys and magnificent views all around. More than that Vagamon is also home to a large

variety of flora and fauna, especially orchids. Vagamon also has amenities for trekking, paragliding, mountaineering and rock climbing.

Itineraries include

Kurisumala monastery: Kurisumala means 'Mountain of the holy cross'. Kurisumala monastery, a place of calm and impressive beauty and spiritual delight, 5 km from Vagamon is a famous pilgrimage center for the Christians. The hill area includes 12 sub mounds where pilgrims visit. Travellers can enjoy trekking and climbing this high hill. The area is fully surrounded with tea plantations and lakes.

Walk through Meadows: The rolling green meadows of Vagamon have a lake amidst them. It had been a favourite film shooting location for long.



Fact File

District: Idukki

When to Go: August to May

Temperature: Between 100°C and 230°C (summer)

Altitude: 1,100 meters



Pine Forests: A valley with Tropical dense Evergreen Forests of pine trees lined in rows. The valley in Kolahalamedu, with its groves of pine trees, is a protected area.

Thangal Hill: A center for Muslim pilgrimage. There is an ancient cave though which one can walk for kilometers.

Mooppanpara: It is a V-shaped canyon, one of the

admired view points as well acknowledged as a suicide point. The view from the peak is amazing.

Murugan Para: It is situated on the eastern side of Kurisumala close to Thangal Para. There is a rock-cut temple dedicated to Lord Murugan that attracts a large number of worshippers. ■

The writer is Content Developer, C-DIT





No Tobacco Day and Kerala



More than 5 million people are killed each year. Another 6 lakhs die globally as the result of its second hand usage. Annual death toll could rise to more than eight million by 2030, unless urgent action is taken. Nearly 80% of the world's one billion of its users live in low and middle-income countries. China and India lead its global consumption. Addiction to it, impacts development and leads to poverty. In poorer countries, up to 30% of their income is spent on this, reducing funds available for nutrition, education and health care. Half of its users are killed by this. One in five adolescents in the world starts its usage at the age of 13. One person dies in every six seconds because of this.

And could you name this ubiquitous villain? It is Tobacco

It is also a reason for six out of eight leading death causes in the world. Tobacco or its various products made entirely or partly of leaf tobacco as raw material, and are intended to be smoked, sucked, chewed or snuffed. All contain the highly addictive psychoactive ingredient, nicotine. In view of the above

Over 40% of cancers in the state have a single reason – tobacco. About 50,000 new cancer cases are reported each year because of tobacco. Usage of tobacco by diabetics may result in severe complications. Yet 59% of diabetic patients in Kerala use tobacco. 94.4% of T.B patients were smokers and 71.2% of them still continue smoking.

alarming global statistics, WHO (World Health Organisation) has decided to observe 31st May as No Tobacco Day world over with the objectives of spreading awareness about the ill effects of using Tobacco. 196 countries across the globe has joined this movement with WHO spearheading in the activities to curb the promotion of tobacco sale and usage.

WHO has identified Tobacco use as one of the main risk factors for a number of chronic diseases, including cancer, lung, and cardiovascular diseases. Despite of this awareness, it is commonly used throughout the world. A number of countries including India have legislation restricting tobacco advertising, regulating the tobacco buyers and its usage. Each year WHO put forth a slogan for its fight against tobacco and for 2014 the slogan is, "Raise Taxes, Reduce Consumption and Save Lives".

The Indian Scenario

In 2010, there were about 120 million smokers over the age of 15 where 20 million of them were women. As per a 2011 data, the per capita male consumption is over 6 beedis or cigarettes per day. Each year smoking kills more than 1 million Indians. If not intervened, over 38 million beedi smokers and 13 million cigarette smokers alive today will die prematurely from diseases caused by tobacco use. 170 million Indian adults chew tobacco daily of which 57 million of them are women.

India spends approximately Rs.30,000 Crores annually in both public and private spending for the treatment of tobacco related illnesses, accounting for nearly 25% of all public spending on health. It was estimated that the direct cost involved with treating of four major tobacco related diseases in India was nearly Rs. 54,000 Crores in 2004, which was about 4.7% of India's national health care expenditure. About 15 million people are impoverished annually just because of tobacco consumption.

The Kerala Scenario

21.4% of adults above 15 years age of Kerala's population use some form of tobacco. 10.5% of Keralites are found to be smoking cigarettes and 4.9% like to smoke beedis. Current smoking prevalence is 27.9% among Kerala men compared to national average of 24.3%. 58.6% of daily tobacco users consume

in severe complications. Yet 59% of diabetic patients in Kerala use tobacco. 94.4% of TB patients were smokers and 71.2% of them still continue smoking.

Tobacco exacerbates the burden of communicable and lifestyle diseases in Kerala straining the much famed Kerala model of public health. Nevertheless, the tobacco

(Prohibition and Restriction of Sales) Regulation Act, 2011. Multiple agencies like Food Safety, Health, Excise, Police and Taxes Departments are strictly enforcing the ban of these tobacco products in the state since then.

Kerala Police has made their strong presence in implementing tobacco ban through COTPA,



WHO has identified Tobacco use as one of the main risk factors for a number of chronic diseases, including cancer, lung, and cardiovascular diseases. Despite of this awareness, it is commonly used throughout the world.

tobacco within half an hour of waking up in the morning. Second hand smoking also poses major threat to the society where 41.8% of the population is exposed to passive smoking either at homes or public places. Kerala's per capita monthly expenditure on cigarettes is found to be Rs.836 during 2012-13.

Over 40% of cancers in the state have a single reason – tobacco. About 50,000 new cancer cases are reported each year because of tobacco. Usage of tobacco by diabetics may result

induced health maladies are completely curable if intervened timely, is still good news to hear.

Kerala Government's interventions

Kerala is the second Indian state after Madhya Pradesh, to ban the sale and distribution of gutka and pan masala containing tobacco and nicotine on 25th May, 2012. The new law was promulgated amidst sever pressures from the north Indian pan masala lobbies and was implemented under Rule 2.3.4 of Food Safety and Standards

2003. From October, 2012 to February, 2014 Kerala Police has fined 82,163 persons for COTPA violations all over Kerala. This has brought in Rs.1.32 Crores to the state coffers during the period. Higher Secondary and Collegiate Education departments have been ensuring the total ban of tobacco in their campuses and their sale in the campus vicinity. Health department has become successful in Thiruvananthapuram and Palakkad districts in completely

Higher tobacco taxes = fewer smokers, less death and healthier communities.

World Health Organization

WORLD NO TOBACCO DAY, 31 MAY
www.who.int/world-no-tobacco-day

poor who takes beedis are subject to more severe health issues compared to that of cigarette users. It is found that mortality rate of beedi smokers are 20% higher than that of cigarette smokers. Pan masala was totally

its length and differential taxation on beedis based on mechanisation of production make the entire tax system less rational. Handmade beedis are mostly cottage industry based and hence could evade all duties and taxes.

In India, cigarettes are taxed up to 38% but falls much below the tax recommendation of WHO's 65% to 80%. Also cigarettes are taxed according to its length and differential taxation on beedis based on mechanisation of production make the entire tax system less rational.

Studies have shown that higher tax on tobacco has always discouraged youth from initiating into smoking and compelled the regulars to quit. Studies have proved that a 10% hike in the prices has reduced beedi consumption by 9.1% and cigarette consumption by 2.6%. It is also advisable to keep the taxes float over and above the prevailing inflation. Non-adjustment with inflation makes it always affordable to the poor.

The table shows increasing trends in the tax revenue albeit various restrictions. Though the tax revenue is inclusive of hikes in VAT over the years and periodical price hikes of tobacco products, the sale of the sole tobacco product, cigarette is on an unprecedented rise.

Rajasthan Example

It is found that higher taxes on tobacco products reduce its consumption. Rajasthan has become a living example for this principle. Taxes on tobacco have been increased to 40% in 2011-12 which resulted in the tax revenue of Rs.627 Crores and estimated to have saved over 5 lakhs lives. It was further hiked to 65% in 2013-14 which expected to bring in Rs.900 Crores and expected to bring lights into more lives. This model could be well emulated by all other Indian states to subsidise the cost spent on treatments of tobacco generated diseases.

Tobacco is considered by economists as a "demerit good", since its usage incurs more cost than the revenue generated from its sale. Hence even a larger volume of merchandising may result in draining the exchequer more with the cost on treatment and related health hazards. ■

The writer is a freelance writer

preventing tobacco advertisements of any sort and they are keenly working for similar status in other districts also.

More effective measures required

Of the six policy measures brought forward by the WHO, high taxing is found to be most effective one, which is highlighted through the current year's slogan. Low tobacco taxes in Kerala are the major deterrent in curbing this social menace. Tobacco taxes may be considered as a "sin tax" imposed on its users, since it is supposed to cover treatment cost, impact on family due to mortality, welfare of the affected families and possible



loss of workable man days.

Cigarettes are taxed in Kerala at the rate of 20% (2013-14 budget) while beedis are not at all taxed. Majority of Indian states tax beedis, but Kerala has not taxed it so far, owing to certain political and pro-poor sentiments. On the contrary, the

banned in 2012 and beedi can be imposed with tax to compensate what we lost through pan masala ban.

In India, cigarettes are taxed up to 38% but falls much below the tax recommendation of WHO's 65% to 80%. Also cigarettes are taxed according to

The table below shows the VAT imposed in Kerala on tobacco over the last four years and tax collected which explains the trend in tobacco sales in the state

Year	VAT (%)	Products	Tax Revenue (Rs. in Crores)	Increase in revenue over last year (%)
2010-11	12.5	Cigarettes & Pan	298.99	-
2011-12	12.5	Cigarettes & Pan	315.46	5.5
2012-13	15	Only Cigarettes	413.98	31.2
2013-14	20	Only Cigarettes	607.56	46.76



Dr. Bhaskaran Nair has as many as thirty two titles to his credit which cover a variety of subjects ranging from literary criticism, travelogue, modern science and reflections on men and matters. However, it is as a pioneer in science writing he is acclaimed.

A Silent Centenary

One of the sad ironies about Malayalam letters is that critics, by and large, tend to overlook genuine writers and commemorate those with less credentials. The latest instance in this regard happens to be Dr. K. Bhaskaran Nair, eminent critic and pioneer in science literature, whose birth centenary passed on without any sort of frenzy or fanfare.

In fact, 2013 was his centenary year. And, Grandhalokam, the official organ of Kerala State Library Council, brought out a special issue highlighting Dr. Bhaskaran Nair's contributions in different genres of Malayalam literature. Its front-page query 'Does Malayalam remember Dr. Bhaskaran Nair?' has an obvious inkling of guilt about it.

Born on 25th August, 1913 at Idayarannam, he had his early education at Vaikom where his father Narayana Pillai was a Surveyor in the Revenue Department. Having graduated from University College, Thiruvananthapuram, scoring

1st rank in the University of Travancore, he did research at the University of Madras and secured DSc. Subsequently, he was appointed lecturer and served the University College as Professor and Principal. He was also the Director of Education. After retirement in 1968, he was for some time the Population Educational Officer under the Family Planning Association of India. He also served the Kerala Sahitya Akademy as its Ex-officio Secretary.

Dr. Bhaskaran Nair has as many as thirty two titles to his credit which cover a variety of subjects ranging from literary criticism, travelogue, modern science and reflections on men and matters. However, it is as a pioneer in science writing he is acclaimed. Equally commendable was his literary observations and critical analysis of certain authors. In the latter category is 'Daivaneethikku Dakshinyamilla' (God's Justice has no Tolerance). Among his major works are Modern Science, Kalayum Kalavum (Art and Time), Parinaamam, Puthumayude

Lokam, Upahaaram and a series of primary texts on Science, Geography and Culture.

Dr. Bhaskaran Nair's style has been described as sharp, distinct and devoid of verbose. In fact, he is hailed as a stylist who can drive home any idea without beating about the bush. It flows out from an apparent clarity of ideas that seldom go foggy or cloudy. He might perhaps have shaped his diction harping on truth that is the watch-world of Science.

An assessment of P. Kunjuraman Nair written on the eve of his 60th birthday has often been cited as one of the finest pieces on the legendary poet's many-splendoured legacy. It is quite revealing when Dr. Bhaskaran Nair describes 'P' as a lonely navigator, who rows his boat towards unknown currents in a state of ecstasy. Perhaps, there is no other poet in Malayalam who can be called a prodigy with the exception of Kodungalloor Kunjikuttan Thampuran of old and Changampuzha Krishna Pillai in the modern era.

There are quite a couple of articles that deal with ethical

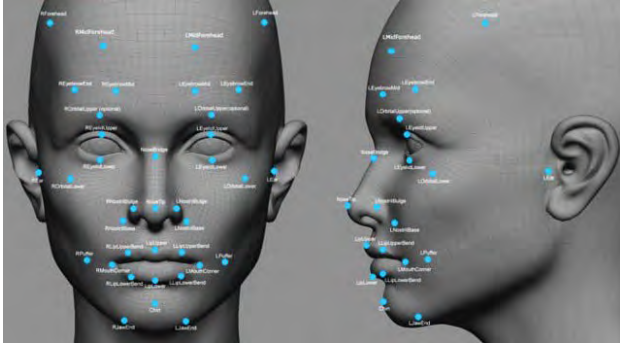
questions on human existence, probing the essence of life against the wanton ways of living. Bhaskaran Nair examines the value and validity of Dharma, Truth and the ultimate meaning of life. He analyses each topic with the keen eye of a scientist and a keener sense of right and wrong. He evinces a sort of spiritual leaning, especially towards the evening of his life, but seldom does he lose his earthy grooming and objective approach.

He has often expressed his intense grief at the human tendency to keep away from the innumerable gifts of Nature. In fact, he has on several occasions focused on the 'insignificant' creatures in our environment so as to drive home the mystery and variety of life on this planet. Starting from minor examples and moving to major realities have always been his style what turns out to be a blessing to the reader. So also, he has introduced a number of celebrated scientists who have contributed a world of good to the living. ■

The writer is Public Relations Officer, Rajbhavan, Kerala



Facial recognition software is improving



Who is that stranger in your social media photo? A click on the face reveals the name in seconds, almost as soon as you can identify your best friend. While that handy app is not quite ready for your smart phone, researchers are racing to develop reliable methods to match one person's photo from millions of images for a variety of applications.

The National Institute of Standards and Technology

(NIST), USA, reports that results from its 2013 test of facial recognition algorithms show that accuracy has improved up to 30 percent since 2010. Images of older individuals were identified more accurately than those of younger persons, suggesting that we become steadily easier to recognize using facial recognition software, and more distinguishable from our contemporaries, as we age.

Newborns exposed to dirt may have lower allergy

Infants exposed to rodent and pet dander, roach allergens and a wide variety of household bacteria in the first year of life appear less likely to suffer from allergies, wheezing and asthma, according to a study conducted by scientists at the Johns Hopkins Children's Centre and other institutions. Previous research has shown that children who grow up on farms have lower allergy and asthma rates, a phenomenon attributed to their regular exposure to micro organisms present in farm soil.

adds a surprising twist: Those who encounter such substances before their first birthdays seem to benefit rather than suffer from them. Importantly, the protective effects of both



Other studies, however, have found increased asthma risk among inner-city dwellers exposed to high levels of roach and mouse allergens and pollutants. The new study confirms that children who live in such homes do have higher overall

allergen and bacterial exposure were not seen if a child's first encounter with these substances occurred after age one, the research found.

No more Passwords

Passwords are a common security measure to protect personal information, but they don't always prevent hackers from finding a way into devices. Researchers from the University of Alabama at Birmingham are working to perfect an easy-to-use, secure login protection that eliminates the need to use a password—known as zero-interaction authentication.

Zero-interaction authentication enables a user to access a terminal, such as a laptop or a car, without interacting with the device. Access is granted when the verifying system can detect the user's security token—such as a mobile phone or a car key—using an authentication protocol over a short-range,



wireless communication channel, such as Bluetooth. It eliminates the need for a password and diminishes the security risks that accompany them.

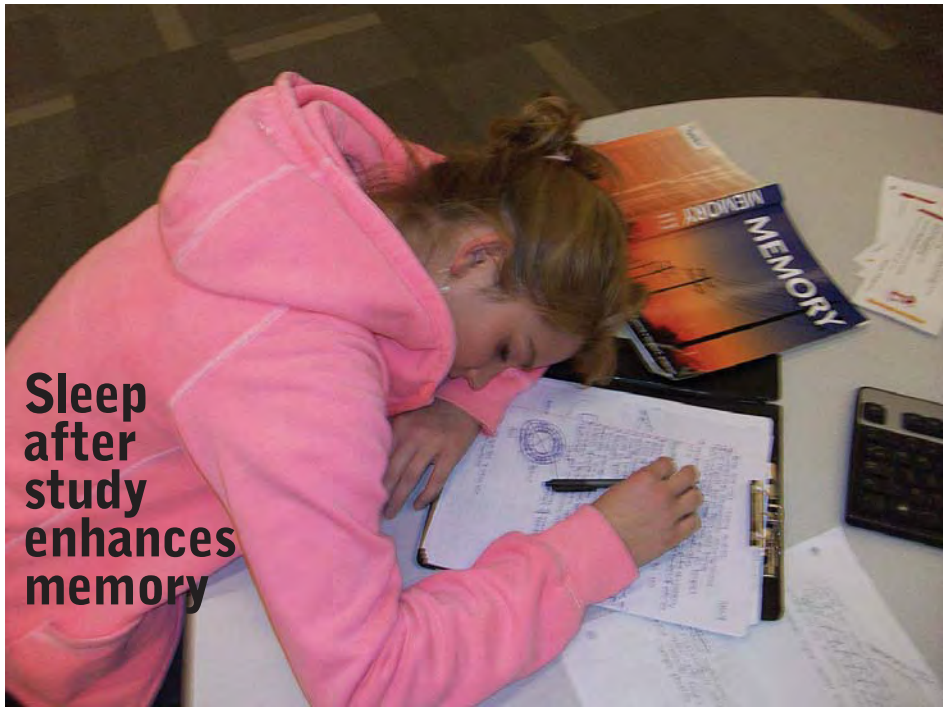
A common example of such authentication is a passive

keyless entry and start system that unlocks a car door or starts the car engine based on the token's proximity to the car. The technology also can be used to provide secure access to computers. For instance, an

app called Blue Proximity enables a user to unlock the idle screen in a computer merely by physically approaching the computer while holding a mobile phone that has been set up to connect with it.

Researchers at NYU Langone Medical Centre, USA, show for the first time that sleep after learning encourages the growth of dendritic spines (the tiny protrusions from brain cells that connect to other brain cells and facilitate the passage of information across synapses), the junctions at which brain cells meet. Moreover, the activity of brain cells during deep sleep, or slow-wave sleep, after learning is critical for such growth.

The findings, in mice, provide important physical evidence in support of the hypothesis that sleep helps consolidate and strengthen new memories, and show for the first time how learning and sleep cause physical changes in the motor cortex, a brain region responsible for voluntary movements. On the cellular level, sleep is anything but restful. Brain cells that spark



Sleep after study enhances memory

as we digest new information during waking hours replay during deep sleep.

Silence of the Crickets

Populations of a male cricket on different Hawaiian Islands have lost their ability to chirp as a result of separate, but simultaneous, evolutionary adaptations to their wings. The changes, which allow the insects to avoid attracting a parasitic fly, occurred independently

over just 20 generations and are visible to the human eye, a study reveals.

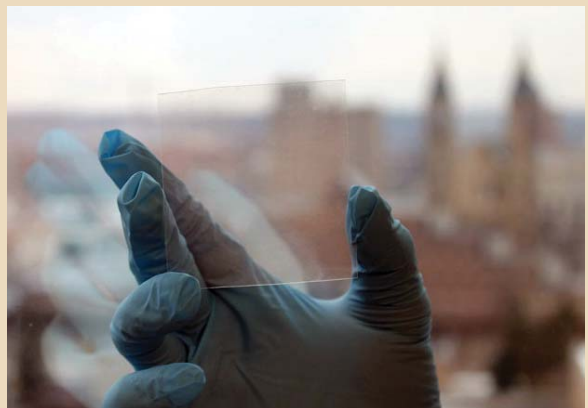
The findings could help to shed light on the earliest stages of convergent evolution — when separate groups or populations independently evolve similar adaptations in response to natural selection. Male field crickets are known for their chirping sound, which is produced by scraping their wings across one another. The wings' veins form special structures that make the vibrations that we hear as the crickets' song. The mechanism is like rubbing your fingernail on the file of a comb, says the study. The nightly serenades lure in females and facilitate reproduction — but unfortunately for the males in Hawaii, the chirping also attracts a deadly parasitic fly. The fly larvae burrow into the cricket and grow inside, killing the host when they emerge a week or so later.



Shatterproof screens to save smart phones

A team of researchers have found that a transparent layer of electrodes on a polymer surface could be extraordinarily tough and flexible, withstanding repeated cello tape peeling and bending tests. This could revolutionize and replace conventional touch screens. Currently used coatings made of indium tin oxide (ITO) are more brittle, most likely to shatter, and increasingly

costly to manufacture. The new technology is cost-effective and flexible providing the same degree of transparency as ITO, yet offers greater conductivity. The novel film retains its shape and functionality after tests in which it has been bent 1,000 times. The annoying problem of cracked smart phone screens may be solved once and for all with this flexible touch screen.





Importance of Youth Parliament

Democracy derives its vitality from the freedom of opinion and discussion which it tolerates. In democracy it is believed that truth emerges from the competition of ideas. The outstanding merit of democracy is to make people vote and participate in public affairs, it compels people to consider public issues and form their opinion on them. In order to take active and meaningful participation in the democratic functioning of our civic and political institutions, citizens are required to have certain competencies. Decorum which is essential for making any

discussion purposeful is flouted and participants are swayed by emotions.

Many a time discussions become one sided in the sense that only the more vocal people present their views and others sit as silent observers. As a result various aspects of a problem are not presented properly, and consequently appropriate decisions are not taken. Here arises the need of strengthening the democratic values among student community and the youth through Youth Parliament sessions in all schools, colleges and professional institutions. Through this process we can attain the twin basic objective of preaching democracy and

develop a better student culture in educational institutions.

Sabhas (General assemblies of the people), (Councils of elders) and Gram Sabhas (Village assemblies) were a common feature in ancient India. In fact, the Gram Sabhas continued to exist in some form or the other in spite of successive foreign invasions in the country. However, it must be admitted that the present democratic institutions that are in existence in the country, are a part of British legacy.

Democracy Need to be Strengthened through Youth Parliament Sessions

The decisions of Parliament/

Legislative Assemblies are important since they affect the whole country in general and states in particular. The decisions are the result of long drawn debates. For conducting debates in Parliament a detailed procedure of rules is followed. The rules are based on democratic principles. By these rules it ensures that everybody gets a chance to be heard and a proper decorum is maintained in the course of discussion. It is, therefore, necessary that at school stage a suitable programme is devised to train students for their role as citizens in a democracy.

Education should make students competent enough to consider public issues and form



their opinion on them judiciously. Youth is a season of hope and aspiration. It is proper to take advantage of this and develop in our young students the necessary civic competence. A good citizen is supposed to be an expert in human relations. This expertness is needed at many points; in inter-group relations; across the table in discussion; in family affairs; in local and national affairs. The meaning of citizenship is not only confined to knowing rights and duties, but also extended to areas of human behaviour.

We must have suitable programme to train our students in the field of human behaviour. In schools we give importance to individual scholarship rather

than to group product. Our students are often taught debate and public speaking skills rather than skills of group dynamics. Many of us feel increasingly inadequate to cope with the problems of group life which are more pressing in the present-day world.

There is a need to develop a programme in which elements of all the four techniques are used and integrated as far as possible. These techniques are used to develop skills and attitudes to deal with problems of group life and which have received attention of educationists: (1) Group Discussion, (2) Sociodrama and Role-playing, (3) Use of Sociograms and other

Devices of Sociometry, and (4) Application of Action Research. The Youth Parliament is a programme in which group discussion and role-playing techniques can effectively be used.

Why Youth Parliament

Citizenship is a way of living and not a subject. Therefore, its learning demands appropriate practice in the living of it. Our approach has to be, not "What

does a good citizen know?" but "what does a good citizen do, and what must he know to do it?" Citizenship education cannot be imparted merely by providing students with factual information. We have to think not only in terms of developing competencies in students but also in terms of influencing their attitudes which are essential for running democracy in the country on right lines. This is possible if we pay some attention to designing and organising purposeful activities for students' participation. The Youth Parliament is one of such activities by which we can impart some real citizenship education.

Objectives of Youth Parliament

The objectives of youth parliament are:

- To strengthen the root of democracy,
- To create healthy habits of discipline,
- To develop the habit of tolerance of views of others; and
- To enable the students community to know something about the working of parliament.

Education should make students competent enough to consider public issues and form their opinion on them judiciously. Youth is a season of hope and aspiration. It is proper to take advantage of this and develop in our young students the necessary civic competence.

Contd. on Page 49



The earliest reference to fishing activities in Kerala is found in the 'Sangam literature' – the Tamil literature that was considered to be produced during the first five decades of the Christian Era. During the Sangam period, people were reported to be engaged in hunting, fishing, cattle rearing and agriculture. After the Sangam period, the next important period in the history of fisheries in Kerala was the age of the Kulasekharas. During this period, fish trade had spread to other Asian and African countries. There are also references of theocratic feudalism where the landlords apportioned the surplus

irrigation purpose. After a detailed study, Day came to the conclusion that the fishes which prior to the construction of weirs had ascended the rivers during the rainy season for the purpose of spawning, were not only prevented from swimming upstream but were collected in vast numbers immediately below the weirs. This resulted in the extermination of the spawning fishes in each season. As per his report, some legislative measures were developed for the conservation of fishery resources.

By the beginning of the twentieth century, attempts were made by Sir. F.A. Nicholson to provide planned fisheries development on modern lines. The

Aquaculture Development



value of fishers and fish farmers through four kinds of taxes, like tax on fishing nets, fishing station, fish farming in inland waters and on fish brought for sale.

The Dutch, during their regime in Kerala, introduced certain restrictions on fishing in the backwaters to preserve and conserve the indigenous stock of fish. Also, fishing in the extensive backwaters was restricted by a system of licensing. During the British period, the efforts taken by British administrators like Francis Day and Fredrick Nicholson for the development of the fishing industry of Madras Presidency were also commendable. Francis Day, in the third quarter of the nineteenth century, conducted his studies in the southern and the northern districts of Madras on the anicuts and weirs constructed for

Madras government sent him to Europe to study the working of fisheries in European countries. In the study report, he proposed reservoir fish farming and fish farming in lakes of considerable depth. His findings had considerable impact on the development of inland fisheries in South India. After Independence, the fisheries and aquaculture sector assumed greater importance in the State and showed signs of improvement in a balanced manner. This was facilitated by the institutional arrangements, five year plans and the policies and programmes envisaged and implemented by the Central as well as State Governments.

Institutions for the Promotion of Aquaculture in Kerala

The organisational set-up of



institutions established for the promotion of aquaculture in Kerala consists of the following components.

The activity brief of institutions developed for the promotion of aquaculture in Kerala is given in chart 1:

Department of Fisheries, Government of Kerala

The Fisheries Department of Kerala, governed by the Minister for Fisheries, is considered to be one of the most important departments, engaged in the development of fisheries and aquaculture sectors of the State. The department serves as an agency for sustainable fishery and conservation of fish resources in the State. It is also responsible for the extension of fish culture in available water sources. A number of agencies work under the department, like Agency for Development of Aquaculture, Fish Farmer's Development Agency (FFDA), the State Fisheries Resource Management Society (FIRMA), and Matsyafed, for implementing various projects and schemes for the promotion of aquaculture in Kerala as well as for the welfare of the fisher folk.

The Department of Fisheries involved itself in a

variety of development programmes and welfare schemes for fishermen that contribute to the growth of the fisheries sector. Reservoir fisheries, Integrated prawn culture in Pokkali fields, Fish seed farms, Nurseries and hatcheries, Integrated scampi/ fish culture in Kole lands of Thrissur and paddylands of Kuttanadu and programmes like Janakeeya Matsya Krishi (JMK) and Matsya Keralam to promote aquaculture in freshwater and brackish water resources of Kerala are some of the development programmes successfully implemented by the Department. In addition to the above programmes, certain welfare schemes like Sea Ranching as an effective measure for the replenishment of the depleting stock of commercially

important species, by releasing sufficient number of hatchery-bred species in estuaries and bar mouth and ranching of open water bodies for the replenishment of the depleting stock, are implemented by the Department periodically.

Agency for Development of Aquaculture in Kerala (ADAK)

ADAK is an autonomous body established in 1989 by the Government of Kerala under the Travancore –Cochin Literary, Scientific and Charitable Societies Act, 1955, with its headquarters at Thiruvananthapuram. Initially, it was established to act as the implementing agency for the Kuwait Fund-aided Kerala Fisheries Development Project on Prawn Culture (KFDPPC). Now, it is the nodal agency for the Government of Kerala to manage, protect and develop aquaculture in the interest of the economy and general

wellbeing of the State, through responsible utilisation of aquatic resources. In connection with KFDPPC, ADAK conducted systematic macro level surveys for identifying potential sites for shrimp aquaculture and developed a model shrimp farm at Poyya in Thrissur district. Under this scheme, assistances were given directly to 42 shrimp farmers for development of semi-intensive culture in 160 ha. But the semi-intensive prawn farming discontinued due to the Supreme Court verdict on Coastal Regulation Zone (CRZ) in 1996.

After the project period, several schemes were implemented by the government of Kerala through ADAK. Some of them are Integrated Development of Aquaculture in Kuttanadu, One Crop Paddy and One Crop Fish Programme, Integrated Development of Pokkali Paddy fields, Development of Sustainable Shrimp Farming in Pokkali Fields, Mussel farming in backwaters, Janakeeya Matsya Krishi (JMK) and the Matsya Keralam Project. To supplement the same, Multi-species

shrimp hatchery at Odayam to provide quality seeds, and PCR labs to control viral disease, brackish water farms at Poyya and Eranholi, were established during different periods. In addition to the above, ADAK implemented demonstration farming of seaweeds in the coastal districts of Kollam, Alappuzha, Ernakulam, Thrissur and Kasargod during 2008. But the programme was considered unsuccessful due to rough sea and unexpected rain which destroyed the rafts in most of the districts. Also, mussel farming in backwaters as a rehabilitation programme under Tsunami Emergency Assistance Programme (TEAP) was implemented through SHGs in eight Tsunami-affected districts of Kerala.

Fish Farmers Development Agencies (FFDAs)

The FFDA scheme was initiated as a pilot project by the Department of Agriculture and Co-operation, Government of India, in 1974 -75 in selected States of the country in order to utilise the village tanks and ponds for the purpose of aquaculture by setting up district-level agencies. Later, the scheme was introduced to more States and at present there are 429 FFDAs covering all the potential districts in the States and Union Territories of India. The FFDAs are provided with necessary funds, extension service units and required infrastructure to develop freshwater fish culture in each district (Sheela, 2000). After merging the 39 Brackishwater Fish Farmers Development

Agencies (BFFDAs) with FFDAs, the functions in connection with promotion of brackish-water aquaculture were also implemented through the FFDAs (Report of Task Force on Inland Fisheries and Aquaculture, 2008).

There are fourteen FFDAs in Kerala covering all districts. The first FFDA in the State was started in Palakkad district on 9th October, 1976. All other FFDAs were established subsequently. In 2008, the functions of 6 Brackishwater Fish Farmers Development Agencies (BFFDAs) were given to the concerned FFDAs in each district. One of the objectives of the FFDA scheme is to create a cadre of fish farmers and help them to take up fish culture in a profitable way. The FFDAs provide necessary training to the

prospective farmers and supply them material inputs needed for farming, on a subsidy-cum-loan basis. They will be also assisted indirectly in getting loans from financial institutions, for capital expenses. The activities of the FFDAs include conducting of surveys in the ponds and tanks available under its jurisdiction.

The private pond owners are motivated to undertake scientific fish farming by registering through the FFDAs. Leasing of public water bodies for fish farming on a wider scale is also considered to make use of all water resources for fish farming. In this regard, a draft policy was formulated by the expert committee on 10th March, 2011 (Report of Expert Committee on Formulation of Draft Fisheries Leasing Policy, 2011). The FFDAs



provide training to registered farmers on all aspects of fish culture. Technical assistances were given to farmers at all stages from stocking to harvesting by the Technical Extension Officers of the FFDAs through their frequent visits in the farms within their jurisdiction. The agency publishes handbooks, booklets, posters, etc., to propagate aquaculture. Also, farmers' meet, seminars, and workshops are organised by the agency to generate awareness among the farmers on improved techniques of aquaculture.

To popularise aquaculture among the public, the agencies take part in the exhibitions and trade fairs organised by the department and other agencies. The FFDAs own their own seed hatcheries to provide quality seeds to the farmers on a subsidised price. A number of rearing farmers were also trained through the FFDAs to maintain nursery and hatchery and to supply quality seeds to the farmers within their jurisdiction. The beneficiaries of the developmental schemes of the Government of Kerala are selected through the Fades at the local level, with the help of various level steering committees. The successful 'Janakeeya Matsya Krishi' (JMK) and the 'Matsya Keralam' projects were implemented through the FFDAs all over Kerala. Now, the present government has implemented the latest 'Matsya Samrudhi' project through the agencies on June 2012 in three phases (Malayala Manorama, 2012).

State Fisheries Resource Management Society (FIRMA)

The State Fisheries Resource Management Society (FIRMA) was established by the Government of Kerala in 1997 under the Literary, Scientific and Charitable Societies Act 1955. The main objective of the formation of such an autonomous body was to undertake projects for the development of the fisheries



The Fisheries Department of Kerala, governed by the Minister for Fisheries, is considered to be one of the most important departments, engaged in the development of fisheries and aquaculture sectors of the State. The department serves as an agency for sustainable fishery and conservation of fish resources in the State. It is also responsible for the extension of fish culture in available water sources.

sector in Kerala with emphasis on management and conservation programmes under fisheries and to build up appropriate contacts with other research and development agencies in the country from the State/Central Institutions and abroad so as to get all relevant information and data required for planning and evaluation. FIRMA promotes ornamental fish production and trade through Kerala Aqua Ventures International Limited (KAVIL) – a public-private limited company with not less than 26 per cent government share. Under the Tsunami Emergency Assistance Programme (TEAP), FIRMA developed a 'Micro Enterprise Rejuvenation' strategy to promote ornamental fish production units in the affected coastal districts of Kerala.

To conserve the endangered species through habitat protection, fish sanctuaries were established in various selected water bodies. The society implements management action plan for man-

grove afforestation in the Ashtamudi Estuary and Sasthamkotta lake, under the Centre for Water Resource Development and Management (CWRDM). To protect the endangered fish species called Masheer, a Masheer hatchery was established in Wayanad to produce the seeds of the fish and later ranching in open water bodies to replenish the stock. The Society conducts relevant studies for habitat protection in the rivers and reservoir systems of Kerala to make suitable suggestions and recommendations to the Government (Vijayasree, 2006).

Matsyafed

The Kerala state Co-operative Federation for Fisheries Development Ltd. (MATSYAFED), was registered on 19th March 1984 as an Apex Federation of primary level welfare societies in the coastal fishery sector with the objective of ensuring the economic and social development of the fishermen community by

implementing various schemes aimed at promoting the production, procurement, processing and marketing of fish and fish products. To develop Aquaculture along scientific lines and to impart training-based extension, MATSYAFED operates three brackish water fish farms, three brackish water prawn hatcheries and one freshwater prawn hatchery. Apart from the distribution of inputs, MATSYAFED is also envisaging the setting up of adequate marketing infrastructure, providing margin money for the primary societies, and training to the fish farmers (Dinakaran, 2000).

In addition to the above mentioned State Government agencies, central government organisations and institutions like MPEDA, CMFRI, CIFT and NIFPHTT are actively involved in a special initiative to promote the aquaculture environment of Kerala. The activity brief of these institutions was discussed earlier.

Programmes implemented for enhancing Aquaculture Production in Kerala

The two important landmark programmes of the State Government in augmenting aquaculture production in the State were Janakeeya Matsya Krishi and Matsya Keralam Projects. A brief review of these two programmes is attempted next.

Janakeeya Matsya Krishi (JMK)

JMK was designed as a people's participatory programme for utilisation of water bodies by attracting neo-farmers and unemployed youth to the field of fish culture. Even though, JMK was a programme primarily aimed at utilising available water resources of the State for aquaculture, it was conceived as an approach programme for the development of the fisheries sector of the State. The freshwater fish culture and the brackishwater fish culture are the two successful phases of JMK programme (Ghosh, 2000). The reports suggest that JMK was a successful programme, which could achieve its targets before the scheduled time (John, 2000).

From the growth rate reported on annual inland fish production, it is evident that the JMK had a tremendous impact on the inland fishery sector of Kerala in augmenting inland fish production.

Matsya Keralam

The Matsya Keralam project was aimed at increasing inland fish production from the current level of 75000 tonnes to 2 lakh tonnes over a period of three years. The first phase of Matsya Keralam project started on 16th September 2008. Even though it hasn't attained the target of 2 lakh tonnes per annum in inland fish production, the production increased to 1.5 lakh tonnes after the completion of the programme. The programme was implemented in three phases through FFDA's with the support of local self-governments. The

project also aimed to create new employment in rural areas, to increase the export of fish and fish products, and to develop a well-designed marketing system for aquaculture products. The first phase showed amazing results especially in shrimp and mussel farming. As many as 4608 beneficiaries participated in the first phase. The second phase covers both freshwater and brackish water aquaculture. A total of 22284 beneficiaries participated in this phase. The third phase also covers both freshwater farmers and brackish water farmers (Economic Review, 2011).

Matsya Samrudhi

To augment fish production from the present 1.5 lakh tonnes

2000-2011 is considered. The following Table shows the fish production from the two major fisheries sectors of Kerala economy.

From the above Table, it is evident that marine fisheries contribute the largest share in total fish production over different years. But, while looking at the percentages of share in total production from marine fisheries, a decrease in trend is clearly visible. Likewise, while looking into the inland fisheries, the production has increased from 0.45 lakh tonnes in 1993-94 to 1.21 lakh tonnes in 2010-2011. Even though the inland production is showing an increasing trend, its impact is not found in the total production due to its low contribution of share in

fisheries production. While looking at the marine production and total production, a valid linear trend for expressing growth can not be predicted using regression tool.

Potential for Aquaculture Development in Kerala

Kerala has immense potential for the development of aquaculture in different culture environments like freshwater, brackish water and marine water. But, these resources have not been exploited adequately till date. The underutilisation of resources can be explained with the help of the following data explaining the district-wise details of brackishwater area suitable for aquaculture in Kerala, prepared and published by the



to 2.5 lakhs tonnes per year, the Government of Kerala has implemented a new programme named 'Matsya Samrudhi'. The programme launched on June 2012 and will continue for a period of three years. This programme, like the earlier ones, envisages to promote freshwater and brackish water aquaculture with an expected outlay of 194 crores (Malayala Manorama, 2012).

Analysis of Fish Production in Kerala

To analyse the growth in fish production, marine and inland fish production from 1993-94 to

total production and decrease in production from the marine sector. The same is clearly visible from the following time series chart.

The time series data on inland fisheries production seem to show a linear trend from 1994 to 2011. Using the function $y = a + bx$, the equation estimated using regression tool, results in $b = 0.038$, $a = 0.399$, which is valid with a significant R^2 value of 0.865. Thus, the initial production from inland fisheries is expected to grow at an annual linear rate of 0.038. This indicates the gradual increase in inland

Department of Fisheries, Government of Kerala.

The Table clearly indicates that more than 77 per cent of brackishwater area suitable for aquaculture remains unused in various parts of the above districts. The lack of promotional and/ or policy measures may be the reason for this underdevelopment of aquaculture in these regions. The Draft Report on Fisheries Leasing Policy submitted by the Fisheries Expert Committee on 10th March, 2011, indicated that the absence of a suitable leasing policy for the utilisation of water

resources as the major reason for the slow development of aquaculture in Kerala (Report of Expert Committee on Formulation of Draft Fisheries Leasing Policy, 2011). The under-utilisation of water resources is also applicable to other culture environments like freshwater and marine water. The marine aquaculture, popularly known as mariculture in Kerala, is still in its experimental stage. Stock enhancement and sea ranching are being discussed over the last few decades, ever since it was observed that the natural fish stock is depleting due to over-exploitation. The Rajiv Gandhi Centre for Aquaculture (RGCA) is acting as the research and development wing of MPEDA with the mandate for undertaking activities like hatchery production of aquatic species that are being continuously over-exploited and sea ranching of such species to enhance the stock. They have done some activities for the ranching of species like sea bass and cobia in certain selected areas (Fishing Chimes, 2011). In freshwater aquaculture, there is also great scope for increasing fish production from reservoirs, lakes and rivers. The integration of aquaculture with other agricultural operations is proved to be effective in Kerala, but it needs to be extended to the untapped areas.

Aquaculture Development- the Major Concerns

Any development should be permanent and pave the way for further development. It should not lead to deterioration of economic, social or environmental conditions of people. At this juncture, it is wise to discuss in general, the dark side of aquaculture development. It was reported that the uncontrolled, unauthorised development of aquaculture in the early 1990's has done extensive damage. Though aquaculture has been advocated with lofty ideas and objectives, it has resulted in woes and miseries

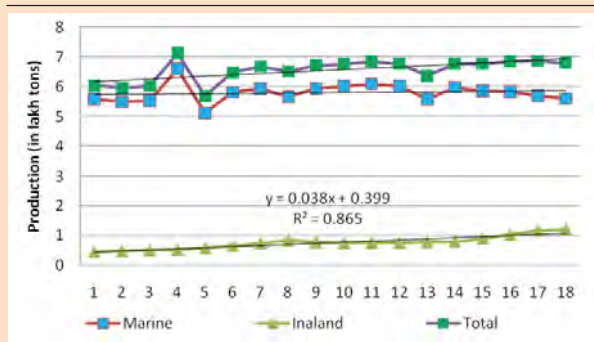


FISH PRODUCTION IN KERALA FROM 1993-2011

Year	Production (In lakh tonnes)		
	Marine	Inland	Total
1993-1994	5.59(92.55)	0.45(7.45)	6.04
1994-1995	5.49(91.96)	0.48(8.04)	5.97
1995-1996	5.53(91.71)	0.50(8.29)	6.03
1996-1997	6.61(92.71)	0.52(7.29)	7.13
1997-1998	5.11(89.81)	0.58(10.19)	5.69
1998-1999	5.82(89.81)	0.66(10.19)	6.48
1999-2000	5.94(88.92)	0.74(11.08)	6.68
2000-2001	5.67(86.96)	0.85(13.04)	6.52
2001-2002	5.94(88.39)	0.78(11.61)	6.72
2002-2003	6.03(88.94)	0.75(11.06)	6.78
2003-2004	6.09(88.91)	0.76(11.09)	6.85
2004-2005	6.02(88.79)	0.76(11.21)	6.78
2005-2006	5.59(87.76)	0.78(12.24)	6.37
2006-2007	5.98(88.20)	0.80(11.80)	6.78
2007-2008	5.86(86.56)	0.91(13.44)	6.77
2008-2009	5.83(84.99)	1.03(15.01)	6.86
2009-2010	5.70(82.97)	1.17(17.03)	6.87
2010-2011	5.60(82.23)	1.21(17.77)	6.81

Source: Department of Fisheries, Govt. of Kerala

Note: figures in parenthesis represent percentage to total production.



Source: Department of Fisheries, Govt. of Kerala
Fisheries production of Kerala from 1993 to 2011

to the local people of Sirkali Taluk of Tamil Nadu. The intensive aquaculture in the region resulted in environmental degradation and groundwater pollution (Pankajam, 2000). In a study conducted in West Godavari district of Andhra Pradesh it was concluded that aquaculture in the region by converting agricultural lands into aquaculture ponds led to a number of economic problems relating to employment, food grain production and environment in the area (Ramakrishna, 2003). In another study, it is reported that the unmindful increase of shrimp culture became very obvious when a number of fertile land near the farm and groundwater in the vicinity of the farm turned saline. The fertile land of Nagapatinam and Thanjavur once called the granary of south India, turned almost fallow as a result of percolation of salt water let out from the shrimp farms, and the presence of high salt content in the soil (Geetalakshmi, 2002). In December 1996, the Supreme Court had to step in to protect the coastal environment, and to control the indiscriminate growth of shrimp farms. That resulted in the setting up of the Aquaculture Authority in 1997. Parliament in 2005 passed the Coastal Aquaculture Authority Act (Act 24 of 2005) and the Central Government has framed the Rules and Guidelines to improve the productivity under sustained conditions (Coastal Aquaculture Authority, 2006). In Kerala, it is reported that the semi-intensive prawn farming under Kuwait Fund Aided Project was discontinued due to the Supreme Court verdict on CRZ (ADAK, 2006). The facts above call for sustainable aquaculture development. Through innovative aquaculture technologies and healthy management practices, the aquaculture production can be improved in an environment-friendly and sustainable manner. ■



Yellow Bells



The large showy bright golden yellow trumpet-shaped flowers which hang in showy clusters at the branch tips is a feast for bees, butterflies and humming birds; this is the flowering plant named Tecoma stans, which also possess the common names like Yellow Bells, Yellow trumpet bush, Yellow elder etc. Yellow trumpet bush is an attractive ornamental plant which is suited for growing in tropical regions. The yellow flowers are very showy against the lance-shaped, olive vibrant

green leaves with sharply pointed oval leaflets having toothed edges.

The individual flowers are broadly tubular, 5cm long with five rounded lobes. The flowers are yellow and bell shaped when inverted, hence called Yellow bell flower. The blooms appear in the plant throughout the growing season. They are later followed by bean-like pods that hang in clusters from the plant. In these pods seeds are concealed. If the seed pods are cut after flowering it is seen that it promote more blossoms. This is an evergreen

shrub which loves sun and heat. They can also grow in partial shade lighting conditions. Especially if it gets plenty of sunshine in the morning it doesn't mind shade in the afternoon. It blossoms in any light but will flower more in more sunshine.

Yellow trumpet bush is drought tolerant and do well in any type of soil preferably well drained. An irrigation schedule that allows enough time for the plant to dry out between watering is always preferred. Hence this low maintenance plant is an excellent choice for an amateur

gardener. Incidentally Tecoma stans is the official flower of United States from where the plant originates. In Kerala homesteads this is widely cultivated as an ornamental as it attracts everyone by its natural beauty.

The plant reaches a height of 10 to 12 feet and several feet wide. It can grow very wide with long drooping branches. These are fast vigorous growers also. But it is better to keep the plant 5 to 7 feet tall and wide. Yellow bells can be propagated both from seeds as well as cuttings. The seed pods formed in the plant are allowed to remain there until they turn dry and brown. Fill a pot with coarse sand and moisten it.

Put the seed into the soil to a depth equal to its width. Keep it in indirect sunlight and maintain moisture always. It may take one month for the seeds to germinate. After developing the third set of

leaves they can be transplanted to the garden. The light and papery seeds can also be wind dispersed. But propagation using soft wood cuttings is much easier than this. Remove stem cuttings about 2 to 4 inches long from the semi-woody branch tips with a sharp knife during spring or summer months. Place the cuttings in a mixture of sand, leaf manure and perlite in a small pot.

Cover the pot and cutting with a plastic bag secured to the pot with a rubber band. Place the potted cutting in indirect light. The cutting can also be placed under fluorescent light. Wet the medium as needed. Transplant the seedling after it has acquired sufficient growth after three to four weeks. Adding well dried cow manure as basal dose while planting is the best food for plant establishment and growth.

When plants are planted close trimming becomes very

essential for overall size. But if it is planted correctly trimming may not be necessary. If the width of the plant flows out trim those unwanted branches in time. Usually seedlings are planted 4 to 6 feet apart in commercial gardens. But in homesteads this is not necessary. Only thing is that be prepared for trimming the closely grown plants as and when needed so as to avoid overcrowding and unhealthy growth. The plant can be grown in large containers also.

The plant requires fertiliser application during three times a year in spring, summer and autumn. Application of bone meal, dried powdered cowdung, biogas slurry or vermicompost are all recommended

As a garden plant Yellow bells has so many uses. It can be a corner-of-the-house shrub; it can easily be grown under tall palms; it can be a backdrop for small

shrubs; it can be grown along a fence or property line; it can be used as a privacy plant screen; it can also be grown as a single yard specimen; it can be a filler plant for a corner; it is useful as a shade plant in patio too. Yellow bells are a good choice for landscaping, rock gardens and perennial gardens. Well grown flowers will be covered with yellow flowers having a peculiar scent. The spent flowers should be removed to encourage bushiness and to encourage more flowering

The plant is reported to have some medicinal properties also. The root is a powerful diuretic, vermifuge and tonic. A grinding of the root and lemon juice is reportedly used as an external application for stings or bites by poisonous creatures. Anyway Yellow bells blooms with multitudes of golden yellow flowers all year round. ■





Mahalanobis and the Indian Statistical System

In recognition of the notable contribution made by professor Prasanta Chandra Mahalanobis (1893-1972) in the fields of economic planning and statistical development in India, the Government of India has designated 29th June every year, coinciding with his birth anniversary, as the Statistics Day in the category of Special Day to be celebrated at the national level. The objective of the Day is to create public awareness among the people, especially among the younger generation, about the role of statistics in socio-economic planning and policy formulation.

Though statistics are used by large number of planners, policy makers, researchers and political leaders in India, there is a general feeling that many of them are not fully aware of how the Indian Statistical System operates.

Salient Features of the System

The Federal Structure of the country has influenced the organisation of Indian Statistical System (ISS). In the Constitution of India the subjects coming under the statistical system are



PC Mahalanobis

included in the Union list and in the Concurrent list. The Collection of Statistics Act, 2008 which came into force in June 2010 is based on the above constitutional provisions. As such the State Statistical System (SSS) is an integral part of the ISS and there exists a two-way dependence between the two systems. The main features of ISS are:

- Official Statistical System is its predominant component.
- It is laterally and vertically decentralized
- Data collection and other

allied aspects such as compilation, processing and preparation of results are carried out for some of the sectors although there is wide divergence across the states.

- State-wise data for certain sectors/parameters flow to the Centre and the statistics thereof at the all-India level are usually obtained through aggregation.
- Sample surveys are carried out to meet the data gaps but these are often not available at the sub-state level for the planning purpose at lower

administrative levels.

Statistics produced and disseminated by government agencies are collectively termed as official statistics. According to the United Nations Statistical Commission (UNSC) "official statistics provide an indispensable element in the information system of a democratic society, serving the government, the economy and the public with data about the economic, social and environmental situation. To this end, official statistics that meet the test of practical utility are to be compiled and made available on an impartial basis by official statistical agencies to honour citizens' entitlement to public information. To retain trust in official statistics, the statistical agencies need to decide according to strictly professional considerations, including scientific principles and professional ethics, on the methods and procedures for the collection, processing, storage and presentation of statistical data." Besides the above, the Commission has also laid down many principles of universal application for the production and use of official statistics.

Mahalanobis and ISI

P. C. Mahalanobis was a physicist - turned statistician. As a young professor of physics in the Presidency College, Kolkata he took keen interest in statistics which was stimulated by Dr. B. N. Seal of Kolkata University. Statistics according to him meant quantitative information



The need for a strong statistical system for economic planning was keenly felt by the planners and policy makers after Independence. A large number of statistical units were established in various ministries/departments at the Centre and in the states.

necessary for state craft and is a key technology for national development. Mahalanobis had an articulated philosophy of research in statistics and most of the research work in India during 1920-35 was done single-handedly by him. All his theoretical concerns in statistics were borne out of practical problems connected with the problems of social, economic, cultural and scientific development of the society. He was also a promoter of scientific research and builder of institutions. As such he along with the professors of Economics and Applied Mathematics and other colleagues of Presidency College in a meeting resolved to establish the Indian Statistical Institute (ISI).

It was registered under the Societies Registration Act of 1860 in April 1932 and Mahalanobis became its founder Director. The Institute was set up to carry out research, teaching and training and project activities. It gradually became an important part of the Indian Statistical System through its pioneering work on large scale sample surveys. By an Act of Parliament, the Institute was declared as an Institute of National Importance in 1959 with the right to hold examinations and award degrees and diplomas in Statistics. Based on large number of pilot studies, Mahalanobis rightly viewed the use of well designed random sample surveys for collecting socio-economic data as not only cost-saving but equally important as capable of generating more reliable and accurate data than complete enumeration.





Therefore in 1949, at the instance of Prime Minister Nehru, it was decided to conduct a comprehensive national sample survey covering the whole country to collect essential statistical information. As the Indian Statistical Institute has the technical staff with special knowledge and experience in the theory and organisation of sample surveys, the task of preparing the scheme was entrusted to it.

Among his many contributions, the development of large scale random sample survey technique is of lasting value. He has also developed a team of technical staff with special knowledge and experience in the theory and organisation of sample surveys. He took the initiative to start the Indian Journal of Statistics of the highest standard 'Sankhya' by ISI in 1933. He was the editor of this journal till his death in 1972. Over 60 of his research papers were published in this journal during this period. With this background of Mahalanobis, we may now examine his contribution to the development of ISS.

Mahalanobis and ISS

The need for a strong statistical system for economic planning was keenly felt by the planners and policy makers after Independence. A large number of statistical units were established

in various ministries/ departments at the Centre and in the states. The existence of a large number of statistical units resulted in some overlapping and duplication of functions and responsibilities and an avoidable waste of efforts and resources. In 1948, at the instance of Prime Minister Jawaharlal Nehru, a review was made of the organisation of statistics in the central ministries and

constituted a Standing Committee of Departmental Statisticians with Prof. P. C. Mahalanobis of Indian Statistical Institute (ISI), as chairman to oversee the functioning of statistical system in the country. In the same year the National Income Committee was constituted with Prof. P. C. Mahalanobis as Chairman and Prof. D. R. Gadgil and V. K. R. V. Rao as members to report on national

income and related issues.

A joint meeting of the Standing Committee of Departmental Economists and Statisticians held in January 1949 recommended the formation of a Central Statistical Office in the Cabinet Secretariat which would function as a co-ordinating body. The Government of India accepted the recommendation in principle, but to start with decided to set up a Central Statistical Unit attached to the Cabinet Secretariat which would function in an advisory capacity and would form the nucleus of the Central Statistical Organisation. Prof. P. C. Mahalanobis was appointed as the Honorary Statistical Advisor to the Cabinet and the unit started functioning on 28th January 1949. For more than two years the unit was entirely staffed from and run by the ISI. In 1951 the central statistical unit was converted into Central Statistical Organisation (CSO) and was assigned all the usual functions of a national statistical office. Gradually CSO developed into a full fledged organisation with wings for national income statistics, statistics for planning, industrial statistics, and so on.

Absence of reliable statistics on the socio-economic condition of the people was keenly felt by the planners and administrators. Therefore in 1949, at the instance of Prime Minister Nehru, it was decided to conduct a comprehensive national sample survey covering the whole country to collect essential statistical information. As the Indian Statistical Institute has the technical staff with special knowledge and experience in the theory and organisation of sample surveys, the task of preparing the scheme was entrusted to it. The ISI under the leadership of Mahalanobis with the help of the Gokhale Institute of Politics and Economics, Poona under the direction of D. R. Gadgil prepared the design with detailed plan for a national sample survey. The plan for the National Sample



Gokhale Institute of Politics and Economics, Poona

Survey with reference year 1950-51 was submitted to the Government of India in April 1950 and it was approved in the same month by the Government. A Directorate of National Sample Survey to collect and process comprehensive socio-economic surveys was established in the year 1950.

Thus with the establishment of CSO and NSS the foundation for a modern statistical system was laid before the launching of Five Year Plans in the country. The Department of Statistics was created in 1961 for the co-ordination of all statistical activities of States/UTs and of different ministries at the Centre and for liaison with international bodies. Now the Department is under the control of the Ministry of Statistics and Programme Implementation.

When we trace the history of Indian Statistical System during the six decades after 1950, we can find that the first two decade period (1950-70) was a golden period largely due to the influence of Mahalanobis. During this period CSO carried out its function of lateral co-ordination at the Centre mainly through the Technical Advisory Committees or through the Working Groups for Statistics in different sectors. The vertical coordination with the state statistical system was achieved through the annual conference of Central and State Statisticians/Central Technical Advisory Council on Statistics. The ability of CSO in its role as co-ordinator depends on its capacity to persuade Central Ministries and State Economics and Statistics Departments to co-operate and participate as a team for improving the statistical system in the country. Because of the effective co-ordination during this period the Indian Statistical System was not only one of the best among the developing countries but also comparable to that of many developed countries. During this period NSS had become one of the most important organisations in the world supplying valuable data on the socio-economic conditions of a country.

The Statistical system in the country is linked to the United Nations Statistical Commission (UNSC) established in 1947. It is the apex entity of the global statistical system and is the highest decision making body for international statistical activities, especially for setting of statistical standards, development of concepts and methods and their implementation at national and international levels. Professor Mahalanobis attended almost all sessions of UNSC upto 1970 and exercised considerable influence in the major activities and recommendations of the commission. Due to his influence the commission established a 'Sub Commission on Statistical Sampling' to further the application of sampling methods in different countries and fields of subject matter. He was in close contact with almost all the important statisticians and almost all the statistical organisations in all the countries of the world.

Death snatched him away in 1972 when he was still active. All those in the fields of statistics, economics and planning are aware of the fact that he was a good builder of institutions and laid the foundation for Indian Statistical System and also as the architect of Second Five Year Plan of India. ■

The writer is former Director, Economics and Statistics Department

Contd. from Page 37

Conducting/Organising Competition

For developing the caliber of student community in making them competent to meet the challenges and also for brain storming instead of political penetrations, the institutions shall organize :

- Quiz Competition for improving their general knowledge,
- Elocution/Debate Competition for improving their skill in public speech and insight into the new issues which are faced by the public in their real life situations,
- Essay writing Competition for improving their writing skills for approaching problems.
- Activities related to fundamental duties for a better performance especially ethical in nature.

Over the years, law-making procedure has become complex and, therefore, requires training and special effort to be conversant with it. Familiarity with the procedure is an imperative for effective and purposeful participation in parliamentary debates. Association of young leaders with the parliamentary activities is good for the country, but their purposeful participation depends upon their acquaintance with the procedure. Even political parties have felt the need for training and orienting their youth legislators. In the light of this development the scheme of Youth Parliament should go a long way in equipping future legislators for their role in the country's parliament and state legislatures.

Purposes of Youth Parliament

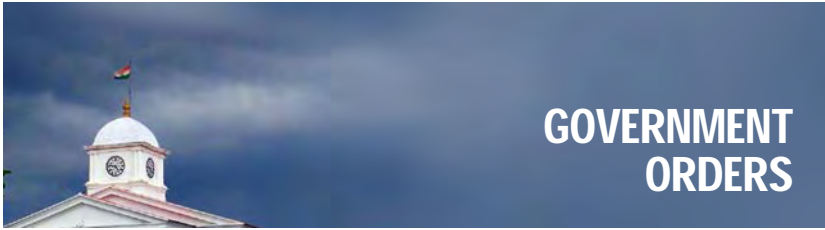
The purposes of Youth Parliament are:

- To make students understand the parliamentary procedure.
- To develop an insight into the working of parliament
- To make students consider public issues and form their opinion on them.
- To train students the technique of group discussion
- To develop an ability to arrive at a decision after group discussion.
- To develop in them respect and tolerance for the views of others.

- To develop an understanding that respect for rules is essential for conducting any discussion.
- To train students in group behaviour.
- To make students aware of various problems faced by our society and the country.
- To develop leadership quality in students.
- To make students understand the common man's point of view.

Conducive environment without any political rivalry among students in educational institutions and sitting together in a common platform for a healthy discussion and finding solutions on democratic lines need a system change called Youth Parliament. The pattern of constitution and modus operandi are the same as in the case of unions today. But after math of election the elected body constitute the ruling party like that a ministry and others sit as opposition members. The activities are carried in a manner as is practiced in legislative or Parliament. Through this exercise the students or youth are trained in the democratic system of approach and a good climate in the campuses of educational institutions.

There is value degradation in democracy basically on account of lack of sufficient education and practical training in the conduct of parliamentary procedures, principles and values. It seems necessary to form Youth Parliament Sessions in educational institutions by selecting best students who hold merit positions in their classes, who have debating abilities, who have fairly good knowledge of our country's social, economic and political problems, who have leadership qualities and are interested in extracurricular activities; would desire yield in creating a campus without politics, will solve the entire problems existing today in the campuses of the educational institutions. So it is the right time to initiate steps to make enactment sufficient for the constitution of Youth Parliament in academic institutions and direct universities to consider it mandatory. ■



GOVERNMENT ORDERS

1.GO (Ms) No. 33 /2014 /SJD Dated,Thiruvananthapuram 05-05-2014

The existing guidelines of the Sruthitharangam (Cochlear Implantation Scheme) has been modified for more effective and successful implementation of the scheme. The object of the scheme is to provide cochlear implantation for children selected by Regional and State level technical committees and to provide financial support for auditory verbal habilitation to operated children through empanelled hospitals. The scheme is a joint venture of the Social Welfare department and the Health & Family Welfare Department implemented by the Kerala Social Security Mission.

2. GO (Ms) No. 101 /2014 /Home Dated,Thiruvananthapuram 17-05-2014

Sanction has been accorded to start new police stations exclusively for women and children at Kannur, Malappuram, Thrissur rural, Kottayam, Alappuzha and Kollam. Posts of Six Women sub inspectors, 12 women Additional sub inspectors, 48 women senior civil police officers, 150 women civil police officers, six driver civil police officers, six PTS are sanctioned. The necessary staff for these women police stations will be appointed by way of redeployment.

3. GO (Rt) No. 109 /2014 /ITD Dated,Thiruvananthapuram 17-05-2014

The Government has made it clear through this order that all Government departments/Institutions/PSUs etc. using windows XP operating system shall take action to migrate to free and open source operating system before 30th June 2014. On account of unavoidable circumstances those departments/institutions/PSUs who find the use of windows XP as inevitable shall upgrade to the latest version of windows operating system within the stipulated time period. The order has reiterated that all concerned are directed to migrate to free and open source software forthwith.

4. Circular No.49/2014/Fin dated Tvm 27/05/2014

The Finance Department through a circular has directed all DDOs to ensure that no employee covered under NPS are left without PRAN/applied for PRAN by the end of May 2014 and are also directed to furnish, a certificate to the effect that "all employees working in their office and coming under NPS have obtained/applied for PRAN". This certificate is to be produced at the treasuries along with the salary bill from the month of June 2014 onwards, without fail, the circular said.

5. GO(MS) no.159/2014/H&FWD Tvm dated 30.5.2014

The government has ordered free medical treatment for all those who have a monthly income below Rs. 500/- from all government ayurveda hospitals. Both APL and BPL card holders are eligible for this concession.

6.Circular No.3765 /B1/ 2008 /ITD Dated Thiruvananthapuram 21-02-2014

The Government has clarified through this circular that all the departments may form IT divisions for taking up e-governance initiatives with existing officers and staff, without creating additional posts. Technical assistance and support may be obtained from National Informatics Centre and the IT Mission. The priority will be for induction of modern technology for improving efficiency and service delivery with the available manpower. Earlier in 2008 the Government had issued orders for the creation of IT divisions in all government departments, Public Sector Undertakings and Local Self Government Institutions. It has not been fully implemented and hence this circular.

For details of Govt. Orders and Circulars please visit the websites
www.prd.kerala.gov.in, www.kerala.gov.in,
www.finance.kerala.gov.in

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